

From ab4el.com Thu Jun 2 14:22:36 1994
From: lakeith@wrdis01.robins.af.mil (CONTRACTOR Larry Keith)
Subject: (fwd) Heathkit collection for sale

Path: wrdis02.robins.af.mil!gatech!howland.reston.ans.net!europa.eng.gtefsd.com!
emory!swrinde!news.dell.com!tadpole.com!uunet!sunriv!ronh
>From: ronh@sunriv.UUCP (Ronnie Hughes)
Newsgroups: rec.radio.swap
Subject: Heathkit collection for sale
Message-ID: <163@sunriv.UUCP>
Date: 2 Jun 94 16:00:33 GMT
Distribution: usa
Organization: SunRiver Corporation
Lines: 52

I have the following Heathkit equipment for sale:

SB-301	Receiver	\$100
SB-401	Transmitter	\$100
SB-600	Speaker	\$25
SB-610	Monitor Scope	\$50
SB-630	Console (clock, ID timer, SWR bridge, phone patch)	\$50
SB-650	Digital Frequency Display	\$50
SB-200	Linear Amplifier #1	\$350
SB-200	Linear Amplifier #2	\$250
Combos: Everything		\$800
SB-301/401/600/610/630/650 + SB-200 #1		\$600
SB-301/401/600/610/630/650 + SB-200 #2		\$500
SB-301/401/600/610/630/650		\$300
SB-301/401/600/650		\$225

The SB-301/401 combo provides USB,LSB,CW and RTTY tranceive capability on the 80, 40, 20, 15, and 10 meter bands. The SB-301 also receives 15.0 to 15.5 Mhz. The SB-401 contains the full XTAL set allowing independent transmit and receive frequency control and split band operation. The SB-301 contains the 400 HZ filter but not the 6 Khz AM filter. Units are in working order but have not been used much in the last several years. The SB-650 provides digital frequency display for the SB-301.

The monitor scope can be used for transmitter monitoring, amplifier tuning linearity checks, RTTY tuning and receiver passband monitoring. Last time I used it, the horizational sweep oscillator was not working in the scope.

The "digital" clock in the console is a motor driven device which no longer runs.

The SB-200 is a 80/40/20/15/10 meter amplifier which uses a pair of 572B tubes. Output is 600 to 700 watts with 100 watts of drive on 80 and 40 meters. Lower outputs on 20/15/10 meters. Unit #2 has lower than expected output on 15 and 10 meters and has a dent in the back and one side of the case. It likely needs new tubes which are approximately \$125. It indicates 600 to 700 watts output on 80 and 40 meters as is, but the output decreases sharply on 15 and 10. Unit #1 works well and is in good shape.

I have manuals for each unit. All prices plus shipping.

Ronnie D. Hughes, N5CSE | ronh@sunriver.com or
SunRiver Corp. | uunet!sunriv!ronh
2600 McHale Court, #125 | (512) 835-8001 ext. 118
Austin, TX 78758 |

From ab4el.com Mon May 30 23:05:02 1994
From: Nothing in moderation...! <brewer@anarky.enet.dec.com>
Subject: -=/life, patience and loose plate caps/=-

Hello Firebottle Fans.....

Well, in stripping the tubes out of the Globe king chassis (s) in order to begin cleaning, even though I was EXTREMELY careful, I had problems with the plate caps of a variety of tubes (that had not been removed for 35 yrs!).

2 811's, a 816, and an 866 shed their caps in the removal process. Before you flog me, I was VERY VERY careful! Fortunately none appear to have lost their seal.

...and therein lies the question. How to repair. Remove the brown gunk in the cap, fill with epoxy, and resolder the lead?

Whats your favorite method for repairing (and avoiding repair) these buggers....?

Wheres my kidney belt?
/john
wb5oau

From ab4el.com Thu Jun 2 09:06:50 1994

From: lakeith@wrdis01.robins.af.mil (CONTRACTOR Larry Keith;653 CCSG/SCT)
Subject: 0 center meters?

Have a friend looking for:

a 0 center (10-0-10) DC amp meter.

a 0 center (25-0-25) DC volt meter.

He doesn't want anything huge.. Normal 2 to 3 inch panel meters will do the trick.

Are there any resting in your junkbox?

73,

Larry, KQ4BY

From ab4el.com Mon May 30 09:35:17 1994
From: "Rhett T. George" <rtg@ee.duke.edu>
Subject: Re: 117N7GT

This was a popular one in one-tube phonographs. Crystal phono pickups were used which had output voltages of 3-4 V.
Rhett George

From ab4el.com Wed Jun 1 12:49:05 1994
From: gganderson@augustana.edu (Kevin Anderson -7325)
Subject: 1939 Philco Mystery Control Box (FWD for help)

Can anyone here help Steven? I'm not an old AM radio collector. Please reply to Steven. This message was on the rec.radio.amateur.equipment list.
Thanks. 73 de Kevin, kb9iua

--- Forwarded message follows ---
>From: ap744@FreeNet.Carleton.CA (Steven James)
Subject: 1939 Philco Mystery Control Box
Date: Mon, 30 May 1994 22:52:48 GMT

I am seeking remote control unit for a 1939 Philco radio. This unit, called a "Mystery Control Box," consists of an inlaid walnut cabinet containing electronic circuitry and a type 30 vacuum tube. There is a telephone dial on the front of the cabinet. I would greatly appreciate an E-mail response from

anyone with any information regarding how I might obtain this item.

--

From ab4e1.com Tue May 31 14:47:09 1994
From: "Stephen Jackson" <stephen@unity.ncsu.edu>
Subject: 2.99 Performance Beta

If anyone locally here in Raleigh or Durham has the cd for the Performance Beta, I'd really appreciate it if I could get a copy of the disk images so that I may try it at home, since I don't have a CD-ROM drive or Compuserve account.

Please
respond to stephen@unity.ncsu.edu. Thanks!

Stephen Jackson

--

ROMEO: Courage, man; the hurt cannot be much.
MERCUTIO: No, 'tis not so deep as a well, nor so wide as a church-
door; but 'tis enough, 'twill serve.

stephen@ncsu.edu Stephen Jackson

From ab4e1.com Tue May 31 20:50:54 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: 5/29/1994 Hamfest report

ul> From: ulowell!uunet.uu.net!censun1!gc (Gary Chatters)

 You know, you guys are making me miss my supper!

ul> The oddball find of the day: a Wilcox CW3 monitor receiver with
ul> manual. Asking price was \$10 (and I didn't buy it!). As far as I could
ul> understand from the manual this is a single channel monitor
ul> receiver for HF frequencies.

 I could be wrong, but Don Merz had some sort of rackmount
channel receiver like this for sale a few months ago. Maybe jog his
memory about it. He had spare crystal modules, too.....

--Andy

... Conscience alert: is that rig you call "mint" REALLY mint?

From ab4e1.com Sun May 29 21:10:54 1994

From: fmitchell@rdcclink.rd.qms.com
Subject: <Re[4]: HAL CRI-200> Re: What is a boat anchor?

this is a response to paul's questioning of my cc: to the boatanchor list of a reply that i sent regarding a hal cri-200 rtty terminal unit... paul's message is appended to the end of this message...

my personal definition of a "boat anchor" is technology that is at least one generation behind current technology... the hal cri-200 is a "dumb" rtty modem as opposed to the current crop of "multi-mode" units such as the pk-232, kam, etc... the cri-200 is therefore of the generation immediately preceding the switch to microprocessor based modems which incorporate amtor, pactor, packet, etc...

however... the cri-200, with appropriate software, is still a very useful unit... and the multi-mode designers could take lessons on tuning indicators from the cri-200 tuning indicator...

and... there are several other "previous generation" rtty modems that are very good, such as the hal st-5, st-6, st-5000, st-6000, the irl fsk-1000, the heath hd-3030, the flesher units, etc... all of these i categorize as "boat anchors"... they are available very *cheap* at lots of swap fests...

so... for the purposes of this list, just what is a "boat anchor"???? i certainly don't want to taint the list...

mitch,
wa4osr

```
-----+-----
S. Felton Mitchell, Jr. | WA4OSR DX Cluster Sysop
11 Midtown Park, E.    | fmitchell@rd.qms.com
Mobile, AL 36606-4141 | WA4OSR@W4IAX.#MOBAL.AL.USA.NA
205-342-7259 home      | 205-476-4100 Work
-----+-----
```

----- Reply Separator -----
Subject: Re: Re[2]: HAL CRI-200
Author: regnad@gnu.ai.mit.edu at smtpink-rd
Date: 5/29/94 11:32 AM

Question: Why was this message posted to the boatanchors list? I don't see the connection. Just trying to keep the list focused.

Paul Prescott
N1AAC
regnad@gnu.ai.mit.edu
owner-boatanchors

From ab4el.com Tue May 31 23:12:05 1994
From: Nothing in moderation...! <brewer@anarky.enet.dec.com>
Subject: =/ the still unfinished FAQ/=

"Boatanchors" FAQ
FAQ Maintainer: John Brewer
brewer@anarky.enet.dec.com

Index: * Why boatanchors?
 * What is a "Boatanchor"?
 * Where can I find one?
 * What type of boatanchor should I get?
 * Boatanchor Safety
 * Boatanchor restoration.
 * Where to get parts? ("are tubes hard to find")
 * Where can I find more information?
 * Where and how do hams operate boatanchor transmitters?
 * Typical boatanchors and prices.

Why boatanchors?

Some may question the desire for 80 pound receivers and 100 pound transmitters, both with filaments sitting there getting hot and wasting power in this day of microprocessor based, mega-memored miniaturized transceivers! Although modern radios are extremely good at what they are designed to do, they are about as interesting to operate as a toaster oven. They have no soul.

Additionally, many find a zen-like feeling in taking an old, misused ratty old radio and carefully restoring it back to health. Like cars of the era, boatanchor radios were made to be worked on, modified, and tinkered with. Many think of it as Real Radio in this era where fixing

a transceiver is accomplished by boxing it up to send to the manufacturer for a custom VLSI chip replacement. Indeed, a warm soldering iron is almost a requirement for operating a vintage station.

Others claim that boatanchors SOUND better than their silicon descendents, and this is generally true. The audio from a Hammarlund or National receiver, or a Johnson transmitter can sound much better than the 300mW audio coming out of the 2" speaker in the typical transceiver.

Watching the flicker of 807 modulators in a Viking I as you speak into a D104 mic, is certainly more stirring on a winter night than considering hole and electron flow.

If truth be known, much, if not all of the above although true, are merely justification for the insatiable hunt for more and more of these old boxes, simply because they are just too NEAT to have and operate!

What is a boatanchor radio?

Although there are different interpretations of this term, generally any radio that is "hollow state" or tube-type is considered a boatanchor. Units produced from WWII until the mid 60's are probably the most popular examples of the genre. The origin of the term "boatanchor" becomes self-evident after carrying a DX100 (a classic anchor) to your car and noticing how much longer your arms have become.

Boatanchors may be transmitters or receivers... and no 'anchor station is complete without an assortment of like-aged station accessories like microphones, Transmit/Receive relays, vintage SWR bridges and so on. All of these items are valid subject matter for the boatanchor mailing list.

Where can I find a boatanchor radio?

The best way to find a boatanchor is to let other hams in your area know you are interested in them. Often times

I have been given a boatanchor, because the former owner has relegated it to the garage or basement. This is also the cheapest method. When attending a hamfest, ask some of the sellers if they have any for sale. Often times sellers won't bring such stuff, as it is HEAVY and is perceived as not being sellable. Look under the tables, and in the back of the sellers displays for them! While you are under the tables rummage thru the boxes of parts found under there for parts that will come in handy restoring your new-old treasure. Tubes, high voltage caps, vintage microphones and connectors may be found lurking here!

If you are in a hurry (and have money) ads in Electric Radio magazine (see bibliography), the Ham Trader Yellow Sheets, or your local packet BBS are good places to look. Expect to pay more through these outlets. Also expect to become an expert in UPS shipping rules. Boatanchors are heavy, and often the cost of shipping one can exceed the cost of the entire unit.

What type of Boatanchor should I get?

This is a question that has as many answers as there are individuals. Generally, as a "starter" boatanchor, 50's vintage gear is probably the best way to go. Radios in this era are quite desirable, but often times won't require extensive surgery to get repaired and on the air. A radio from a well-known manufacturer is also a good choice... for receivers, look for Collins, Hammarlund, Hallicrafters, and National are all good radios. In the transmitter space, Collins, E.F. Johnson, and Heathkit (with certain reservations) will do well.

Transmitters with plate modulated AM are the more desirable units. Prices will generally reflect this.

Good "starter" transmitters include, but are not limited to:

Johnson: Ranger I or II/Viking I or II/ Valiant/500

Collins: Any 32V series.

Heath: Apache, DX100A or B

(my AM bias is showing!)

"starter" receivers include:

National 183/183D, HR060 and MANY others

Hallicrafters: Many SX series.

Hammarlund: HQ129, HQ150/160/170/180, Super Pro series, many others.

Collins: any 75A series.

By "starter" radio, I do not mean to indicate the cheapest! Most of these radios would also be on the "best" list. I selected these as they are some of the best, and when one is starting anything, it is good to get the BEST stuff available, rather than getting junk and getting discouraged with it. There will be enough to learn (or remember!) without having to compensate for marginal equipment (was that 'Peak the plate and dip the grid, or the other way around??')! Any radio from this list will do the job for some time, and make operating a pleasure.

Boatanchor Safety

This is a genuine concern! Boatanchor have Real Voltage present in them! Lethal voltages. You will find that capacitors really DO store charge! None of this wimpy 12 volt stuff!

Get back in the habit of discharging any capacitors that are lurking under the hood. Keep one hand in your pocket when working on a hot radio. Be REAL careful and THINK THINK THINK before twiddling with a boatanchor that must be powered up and worked on.

It is SO easy to get used to working on solid state equipment and not worrying about Real Voltages... don't do this!

Also, many older radios are not fused... receivers are good examples of these. I generally replace the line cord (they usually need it anyway) and either put an in-line fuseholder, or some of the Heath-type fused plugs in the radio. Better still, replace the 2-wire plugs with a more modern 3 wire plug. Barring that, ensure that you strap every cabinet with healthy sized cable, to a common station ground. This will prevent you from becoming the cable between two pieces of gear at different cabinet potentials.

Fires are nice to have burning on winter evenings but not when they are on top of your operating desk.

Speaking of operating desks, you will become good at carpentry if you spend much time as a boatanchor operator. You will quickly discover that the table you used to operate your

tranceiver is way too small, and waaayyyy too wimpy to support a growing boatanchor station!

Boatanchor Restoration

This subject could easily fill many pages. Below are just some common topics. The Mailing List is a good place to ask about other issues. Remember the radio that stares at you from your bench is old. There are not many around. Take that into consideration as you proceed through the process. If you erase the dial marking on your receiver by cleaning it with Windex, you likely will not find another at Radio Shack. Take your time and enjoy. The journey to a working boatanchor, like life, is the point not a process. You will say less nasty words if you take your time.

[does someone have Jim lockwoods memo about bathing radios?]
[I'll add my \$.02 about NOT bathing radios!]

Some general restoration tips:

- * Power up old radios gently. Plugging it into the wall and turning it on is not gentle! Bringing it up slowly to operating voltage with a Variac so that electrolytics can "form" is gentle.
- * Check fuses before powerup. Many 'anchors will have the wrong value fuse in it. Checking the fuse before purchase is a good thing to do too. If it's open, you at least know what you are getting into.
- * Don't trust that the tubes that are in the sockets are the correct tubes. Check them against the schematic. If you don't have a manual (and even if you do) note which socket the tube came from so that you can replace them correctly.
- * Don't clean tubes with water. The marking on the glass will likely come off with one good swipe of a water dampened cloth.
- * Assume many electrolytic and paper caps are bad. Check them.
- * Check high resistance, and high wattage resistors for correct value.

- * Nifty tools to have are flux brushes, for cleaning nooks and crannys. Windex is nice for cleaning chassis. Qtips are good to have too.
- * NEVER clean dial markers or drums. If you do, assume that they will wipe away never to be seen again. You WILL say bad words if this happens!
- * WD40 or Scotts Liquid Gold (my favorite) applied to a clean wrinkle finish will do a great job of restoring the lustre. Works well for knobs too!
- * Never use WD40 or Scotts Liquid Gold on anything until you have tried it on a non-visible part of the cabinet to make sure it won't dissolve anything.

[----- help me out here... need more 1 liners and general tips-----]

Where do I get parts? (or "aren't tubes hard to find?")

You will need parts to keep or get a boatanchor on the air. Remember that even 50's vintage radios are 40 years old.

Fortunately, hams are notorious packrats and parts surprisingly abound, for old gear, particularly at hamfests (and in the boxes under the table as mentioned earlier). Word of mouth once again will work wonders at getting tubes, high voltage caps, and the like shoved in your direction. Beware that this is an addiction, and boatanchor radios, parts, and periodicals will soon overrun all available space. Trust me.

If you are in a hurry, or need to get a radio working before your hoard of tubes and parts gets established the list below, taken originally from the ARRL server may be of help.

>-----<

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> American Radio Relay League, 225 Main St., Newington, CT 06111
> (mwilson@arrl.org).

>

> This ARRL Technical Information Service handout has been derived
> >from the June 1992 QST "Lab Notes" column. Information has been
> added to keep it current. You should also periodically check the
> ham-classified section of ham and electronic publications.

>

> How To Locate Manuals and Documentation

>

> "Excellent rig. Needs a little work." How many times have you
> passed up a good deal because you were certain you'd never find
> the service information? How often have you sent your rig to the
> factory for a bug that you could have fixed if you had the
> documentation? Mike Gruber, WA1SVF, one of our ARRL Laboratory
> Engineers, has searched high and low to find sources for service
> manuals and other useful information. In this month's column he
> gives you his results.--WB8IMY

>

> Q: Why do I need documentation for my radio equipment?

>

> A: Unless you're an electronics genius, proper documentation is
> often essential to the repair or restoration of any radio
> equipment. Even a simple schematic can save hours of time that
> would be wasted otherwise.

>

> Q: Okay, but is documentation readily available--even for my
> antique receiver?

>

> A: Believe it or not, there is a good chance that documentation
> still exists for almost any radio you're likely to encounter. Your
> success in finding it, however, depends on knowing what type of
> documentation might be available for your particular piece of
> equipment.

>

> Q: What types of documentation should I be looking for? Where can
> I find them?

>

> A: Let's save the names and addresses for later and begin by
> taking a look at the different types of equipment documentation
> available. There are several:
>
> Owner's Manuals: An owner's manual is supplied with the unit at
> the time of purchase. It's intended primarily as an instruction
> manual for the owner. It may not contain a schematic and service
> data is usually minimal. Although it's better than nothing, an
> owner's manual leaves quite a bit to be desired should a repair or
> alignment be required.
>
> Manufacturer's Service Manuals: Service manuals are usually sold
> by the manufacturer. They contain vital repair, service and
> alignment data. Most manufacturers supply service manuals for
> their products, although some may not provide manuals for obsolete
> equipment. If you're working with old equipment, it's possible
> that the manufacturer may have gone out of business. Keep this in
> mind the next time you purchase a new rig. Obtaining a service
> manual will take a little extra effort, but you'll be making a
> worthwhile investment in the future of your equipment.
>
> Third-Party Service Documentation: This type of documentation is
> is published by companies other than the manufacturer. It's
> available in several varieties from basic schematics to complete
> service manuals. While modern Amateur Radio gear is usually
> excluded, third-party documentation offers a wealth of information
> on antique receivers and modern consumer electronics.
>
> Q: Wait a minute. You mean that there are companies that publish
> and sell service data for another company's products?
>
> A: Certainly! Some of the most noteworthy publishers--past and
> present--include:
>
> Howard W. Sams & Company Photofacts: Sams started publishing
> Photofacts in 1946 with only 12 employees. Today Photofacts are
> accepted as the standard for accuracy. Complete chassis
> photographs are included and each component is clearly labeled.
>
> Alignment procedures and normal voltage readings are always
> provided. The extensive Photofacts library does not include modern
> amateur equipment, but you'll find service data for some of the
> classic shortwave receivers made by companies such as Hammarlund
> and Hallicrafters.
>
> Photofacts are sold in numbered folders and volumes. To obtain the
> correct Photofact, you must find the reference number for your
> particular piece of equipment in the Photofact Index.

>
> There is an interesting sidenote to the Photofacts story. Sams
> creates Photofacts from actual product samples. Instead of using
> the manufacturer's schematics, the circuits are analyzed and
> traced by Sams technicians!
>
> John F. Rider Perpetual Troubleshooters Manuals: "Rider's," as
> this series is commonly known, was first published in 1930 and
> covered radios back to 1926. The first numbered volume, however,
> appeared in 1933. New volumes were published at a rate of about
> one per year until the last one, volume 23, appeared in 1953.
> (Rider's for TVs, however, went from 1948 to 1957, volumes 1
> through 18.)
>
> Rider's is indexed by a system that is very similar to the
> Photofacts. Several index volumes were published, such as volumes
> 1 to 7, 1 to 10, 1 to 15, 16 to 22 and 23 only. Unlike Photofacts,
> however, Rider used service data provided by the manufacturers.
>
> RCA Victor Service Data Books, commonly called "Redbooks." These
> cover RCA receivers manufactured from 1923 to 1950. The first
> volume covered receivers from 1923 to 1928. A new volume was
> published each year until 1950.
>
> Supreme Manuals: Compiled by M. N. Beitman, these first appeared
> about 1930 and covered radios made as early as 1926. One volume
> per year was published until the company went out of business in
> the 1950s. These generally contain only schematics; Riders and
> Photofacts are far more complete.
>
> Hugo Gernsback's Official Radio Service Manuals: Six volumes were
> published from 1929 to 1936.
>
> Mallory Radio Service Encyclopedia: First published in the early
> '30s, the Mallory Encyclopedias contained a very complete listing
> of radios by manufacturer and model number. In addition, an exact
> tube complement was given for each product. This information can
> be very useful if you are seeking service data for an old radio
> with an unknown model number.
>
> Q: Speaking of tubes, what about vacuum tube data? Is that kind of
> information still available?
>
> A: It sure is! Data for Eimac tubes, frequently found in amateur
> amplifiers and other high-power RF applications, is currently
> available from the manufacturer. Transmitting tube data can also
> be found in the ARRL Handbook; look for it in Chapter 35 if you
> have a recent edition. Data books for other tube types, such as

> receiving tubes, have been published by several companies. Most of
> these data books are no longer in print. Copies, reprints and even
> old originals can still be obtained if you know where to look. Two
> of the most popular data books for tubes are:

>
> RCA Tube Manuals: These are probably the most common tube manuals
> -- especially for receiving tubes. Separate manuals were also
> published for transmitting, special purpose and industrial tubes.
> These manuals first appeared in the 1930s and were frequently
> updated.

>
> General Electric Essential Characteristics Tube
> Data Books: These are similar to the RCA Manuals.

>
> Tube substitution guides have also been published by Sams and John
> F. Rider.

>
> Q: Now that I know what I'm looking for, where can I find the
> documentation?

>
> A: If you prefer the manufacturer's service manual, start by
> contacting the manufacturer directly. If the manufacturer is out
> of business, or no longer supplies the manual you need, you have
> other options. For example, try obtaining a copy from a manual-
> supply company.

>
> If you're working with military gear, manual-supply companies are
> also good sources. And, some military equipment manuals can still
> be obtained from the government. (More about that later.)

>
> If you think a Photofact or Rider might be available based on the
> age and type of equipment involved, check with your local library.
> Many city and university libraries have them and will let you make
> photocopies provided that no copyright laws are violated.

>
> If your local library can't help you, try one of the "schematic
> services" that cater to antique radio buffs. Their prices are
> generally quite reasonable. Don't forget to check the hamfest flea
> markets and yard sales. Service information can turn up in the
> most unusual places!

>
> For a difficult case, you might try a classified ad in QST. A
> classified ad in a publication that specializes in the type of
> equipment involved (such as Electric Radio Magazine\1/ or Antique
> Radio Classified\2/ for surplus or antique rigs) may be very
> effective.

>
> ADDRESSES

>
> Q: Come to think of it, I have several radios that could be put to
> good use--if they were working! How about those addresses you
> promised?
>
> A: Here they are. Good luck with your projects!
>
> Alinco Electronics, Inc
> 438 Amapola Ave
> Suite 130
> Torrance, CA 90501
> tel 310-618-8616
> Supplies Alinco manuals only.
>
> ---
>
> Amateur Wholesale Electronics
> PO Box 224
> 1040 Industrial Dr
> Watkinsville, GA 30677
> tel 404-769-8706 (technical service and orders)
> Manuals and replacement parts for Azden Radios.
>
> ---
>
> Antique Audio
> 41560 Schoolcraft
> Plymouth, MI 48170
>
> Older factory manuals for RCA, Zenith (including Transoceanics)
> and several others. Riders volumes 1 through 22, Sams Photofacts 1
> through 600, Beitman's volumes 1 through 10 and Sams Transistor
> Service Manuals volumes 1 through 90. The price is \$5 per
> schematic up to 8 pages. Fifty cents for each additional page.
> Written inquiries for schematics preferred.
>
> ---
> Antique Electronic Supply
> 6221 South Maple Ave
> Tempe, AZ 85283
> tel 602-820-5411
>
> Antique Electronic Supply supplies pre-1960 service manuals for
> many electronic products, including communications receivers. The
> cost is \$4.50 each. A catalog of antique radio parts and books is
> also available. They offer reprints of some older service manuals,
> tube manuals, a tube substitution guidebook and even a ballast
> tube manual. [LOTS of tubes!! /john]

>
> ---
> Ardco Electronics
> PO Box 95
> Berwyn, IL 60402
>
> Manuals for 95% of the Hallicrafters product line. The company was
> founded by Anthony Dambrauskas, the Hallicrafters service manager,
> when Hallicrafters went out of business in 1978. Today, the
> business is being carried on by his son Robert. Manuals range in
> price from \$7 to \$20.
>
> ---
> Brock Publications
> PO Box 5004
> Oceanside, CA 92052
>
> Manuals for for all amateur equipment sold by Swan Electronics.
> Also stocks manuals for Cubic Communications, Astro and Siltronix
> products. Brock Publications is a home business owned by Grace
> Brock who retired from Swan Electronics/ Cubic Communications in
> 1990.
>
> ---
> Cardwell Condenser Corporation
> 80 East Montauk Highway
> Lindenhurst, NY 11757
> tel 516-957-7200
> FAX 516-957-7203
>
> Manuals for Hammarlund equipment. In addition, they also have a
> limited supply of components for Hammarlund receivers and transmitters.
> They also manufacture roller inductors and variable capacitors.
>
> ---
> Center For Legislative Archives
> National Archives
> Washington, DC 20408
> tel 202-501-5350
>
> (Record Group 287) US Army Technical Manuals for radio equipment
> manufactured from 1940 to 1979. Photocopies can be obtained at a
> cost of 25 cents per page and a \$6 minimum order. A "Reproduction
> Service Order" must first be completed by the National Archives to
> determine the cost of the specific manual you desire. The manual
> on this form must be identified by its proper Army Technical
> Manual number. If this number is not known, contact your nearest
> US Government Depository Library for assistance. (These are

> usually the main public libraries in large and medium-sized
> cities.) A booklet entitled Indexes and Lists to Army Technical
> and Administrative Publications 1940-1979; The National Archives
> Microfilm Publications Pamphlet Describing M1641, also available
> >from the Archives, describes this procedure.

> ---
> Dean K Kidd, W7TYR
> 27270 SW Ladd Hill Rd
> Sherwood, OR 97140
> tel 503-625-7363
>

> Manuals and data for older Tektronix test equipment.
>

> ---
> Eico Electronics Instrument Co, Inc
> 363 Merrick Rd
> Lynbrook, NY 11563
> tel 516-599-5744
>

> Eico manuals for the last 25 years. Calls are accepted on Monday,
> Wednesday and Thursday from 8:30 AM to 2:30 PM Eastern time.
>

> ---
> Fair Radio Sales Co, Inc
> 1016 East Eureka
> PO Box 1105
> Lima, OH 45802
> tel 419-227-6573
>

> Manuals for surplus equipment. Also some Tektronix manuals and
> vacuum tube data. Catalog available.
>

> ---
> Hi-Manuals
> PO Box 802
> Council Bluffs, IA 51502
>

> Extensive collection of manuals from the mid-30s to the 70s.
> Amateur Radio equipment is included. You must order from a current
> catalog and "dropped list." The cost is \$3 for both. Many Heathkit
> manuals in stock. They also supply vacuum tube data from the RCA
> Receiving and Air Cooled Transmitting Tube manuals and the Rider
> #35 Tube Substitution Guide. The cost is \$5 per tube plus a
> business-size SASE. Your check will be returned if the tube data
> is not available. Hi-Manuals cannot accommodate technical
> correspondence, quote requests or telephone calls.
>

> ---

> Howard W. Sams & Co
> 2647 Waterfront Parkway East Dr
> Indianapolis, IN 46214-2041
> tel 800-428-7267
> tel 800-428-5331
>
> You can order Sams Photofacts through your local distributor
> (saves postage and handling costs), by mail or by phone. Sams
> covers most consumer electronic items manufactured since 1945. A
> photocopy service for manufacturer's manuals and Rider's data is
> also available.
>
> ---
> ICOM America, Inc
> 2380 116th Ave NE
> PO Box C-90029
> Bellevue, WA 98009-9029
> tel 206-454-7619
>
> Manuals and parts for ICOM products. Call for prices. Most service
> manuals cost around \$25 for base and mobile units; \$20 for hand-
> held units.
>
> ---
> Kenwood (East Coast)
> East Coast Transistor Parts, Inc
> 2 Marlborough Rd
> W Hempstead, NY 11552
> tel 800-637-0388 (orders only)
>
> Kenwood (West Coast)
> Pacific Coast Parts Distributors, Inc
> 15024 Staff Ct
> Gardena, CA 90248
> tel 800-421-5080 (Outside CA)
> 800-262-1312 (CA only)
>
> Kenwood product manuals only
>
> ---
> Japan Radio Company
>
> Service manuals are available from JRC dealers. The three
> companies likely to have JRC manuals in stock are:
>
> Electronic Equipment Bank
> 323 Mill Street NE
> Vienna, VA 22180

> tel 800-368-3270
>
> Gilfer Shortwave
> 52 Park Ave
> Park Ridge, NJ 07656
> tel 800-445-3371
>
> Universal Shortwave
> 6830 Americana Parkway
> Reynoldsburg, OH 43068
> tel 800-431-3939
>
> ---
> Jim Farago
> 4017 42 Ave South
> Minneapolis, MN 55406-3528
>
> A complete set of Riders, Volumes 1 through 23, covering radios
> >from 1924 to 1954. The cost is \$3 per copy plus SASE. The customer
> must provide the unit name, brand name and model number.
>
> ---
> Land Air Communications
> 95-15 108th Street
> Richmond Hill, NY 11419
> tel 718-847-3090
>
> Authorized dealer for Kenwood, ICOM and Yaesu manuals. Also
> carries Collins, Johnson, Hallicrafters, National and other
> manuals. Can provide schematics on most equipment dating back to
> 1945.
>
> ---
> Musty Manuals
> HamHeaven Communication Corp
> 645 Wheeling Rd
> Wheeling, IL 60090
> tel 708-634-6467
>
> An extensive collection of owners manuals, service and maintenance
> manuals, catalogs, magazines and other technical facts on all
> types of early and late model radio equipment--including ham gear.
> Manuals come with updates or articles, product reviews and other
> tidbits of information. Catalog available.
>
> ---
> MECCA
> 1132 Conway Dr

> Newark, OH 43055
> tel 614-522-4944
>
> Used manuals for test equipment, amateur equipment and early
> receivers. Prices range from \$5 to \$35. Send an SASE with your
> request for price and availability.
>
> ---
> Olde Tyme Radio Company
> Suite 317
> 2445 Lyttonsville Road
> Silver Spring, MD 20910
> tel 301-585-8776
> Some RCA Tube Manuals and Riders for sale. Catalog available.
>
> ---
> Puett Electronics
> PO Box 28572
> Dallas, TX 75228
> tel 214-321-0927 or 214-327-8721
>
> Schematic diagrams "for nearly any radio receiver." Cost is \$5
> with manufacturer and model number; \$15 plus drawing and
> description if the manufacturer or model number is unknown.
> Reproduction manuals, Rider's indexes, RCA Vacuum Tube Manuals,
> and many other service/instruction manuals for classic radios and
> related equipment are available. Some amateur equipment manuals
> including Collins. Test equipment manuals include Hewlett Packard,
> Tektronix, Hickock and others. Also supplies recordings of old
> radio shows as well as tubes and other antique radio components.
> Catalog available.
>
> ---
> Radio/TV/Ham Schematics
> Alton H. Bowman
> 4172 East Ave, RD 2
> Canandaigua, NY 14424
>
> A large collection of manuals and schematics for Amateur Radio
> equipment and other electronic products from 1920 to 1970--many
> unusual. Welcomes requests for odd-ball material with and without
> model numbers or labels. Prices are \$5 for schematics and \$7.50 to
> \$10 for manuals. An SASE is appreciated. Alton emphasizes that
> this service is his hobby and not a business.
>
> ---
> R. L. Drake Company
> 230 Industrial Drive

> Franklin, OH 45005
> tel 513-746-6990
> Drake product manuals only.
>
> ---
> Robot Research Inc
> 5636 Ruffin Rd
> San Diego, CA 92123
> tel 619-279-9430
> Robot manuals only.
>
> ---
> Slep Electronics Co
> PO Box 100
> Otto, NC 28763-0100
> tel 704-524-7519
>
> Operation and service manuals; schematic service for old and new
> amateur radios, commercial and military surplus test equipment,
> commercial and surplus military radios, antique radios and
> equipment manuals. Catalog not available due to large stock. Send
> an SASE for price and availability. Include make and model of each
> unit.
>
> ---
> Sony Publications
> PO Box 20407
> Kansas City, MO 64195
> tel 816-891-7550, extension 33 (Customer Service)
> Manuals for Sony shortwave receivers and other products.
>
> ---
> Steinmetz Electronics
> 7519 Maplewood Ave
> Hammond, IN 46324
> tel 219-931-9316
>
> Schematic copies from a complete set of Rider's and Beitman books,
> some older manufacturer's manuals (consumer radios only) and Sams
> Photofacts. The cost is \$3 for the first schematic copy, \$2.50 for
> the second and \$1.50 for each additional copy. Include an extra
> dollar for research if the model number is unknown (SASE
> preferred). Also carries vacuum tubes and other parts. Catalog
> available.
>
> ---
> Surplus Sales of Nebraska
> 1502 Jones St

> Omaha, NE 68102
> tel 402-346-4750
>
> Stocks a complete line of manuals for Collins amateur equipment
> and partial collection of commercial equipment. Call or send an
> SASE for price and availability. Collins parts are also available.
>
> ---
> Ten-Tec, Inc
> PO Box 8010
> Sevierville, TN 37864
> tel 800-833-7373
>
> Manuals for Ten-Tec products only. Most older manuals are
> available and they will make photocopies. Call or write for
> specifics.
>
> ---
> US Army Military History Institute
> Carlisle Barracks, PA 17013-5008
> tel 717-245-3611
>
> Technical manuals for military radio equipment. If possible,
> include the manual number with your request. If this is unknown,
> include a complete description of the equipment including the
> model name, model numbers and the time period in which the
> equipment was in use, if known. Once a specific manual is
> identified, it may be obtained in one of two ways. If the
> Institute possess three or more copies, one may be borrowed through
> interlibrary loan procedures. This process must be initiated at
> the your local library. Alternately, photocopies can be purchased.
> The minimum cost is \$6 for up to ten pages. Each additional page
> is 25 cents. Each patron is allowed up to 300 pages per calendar
> year. Selected bibliographies of Institute holdings are available
> through interlibrary loan.
>
> ---
> Varian Associates, Inc
> 301 Industrial Way
> San Carlos, CA 94070-2682
> tel 800-432-4422
>
> EIMAC tube data for tubes from 1-kW to 1.5-kW plate dissipation
> including all glass-envelope tubes. 200-watt, 800-watt and larger
> tubes are manufactured in Salt Lake City, Utah. You can use the
> telephone number shown above to access either plant for data on
> any EIMAC tube.
>

```

> ---
> VISTA Technology Inc
> 3041 Rising Springs Ct
> Bellbrook OH 45305
> tel 513-426-6700
>
> Newly published manuals for selected models of Rockwell/Collins
> Amateur Radio equipment. Authorized by Rockwell International.
>
> ---
> Western Nebraska Electronics
> HC-84, Box 1
> Potter, NE 69156
> tel 308-879-4552
>
> A complete collection of Collins manuals. The cost is $12.50 for a
> reprint copy, or $35 for a printed copy. Also carries a large
> supply of Collins parts.
>
> ---
> Yaesu USA
> 17210 Edwards Rd
> Cerritos, CA 90701
> tel 310-404-2700
> Owners and service manuals for Yaesu products. Also sells
> components.
>
> ---Notes: \1/Published monthly by Barry Wiseman, N6CSW, 4 Aspen
> Pl, Durango, CO 81301.
>
> \2/Published monthly by John Terrey, 498 Cross St, PO Box 2,
> Carlisle, MA 01741, tel 508-371-0512.
>
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* Where can I find more information?

Well, a good place to start is the boatanchors mailing list!
There are quite a few people with quite a few radios here,
and questions are always welcome. Ask away!

Alternate sources of information:

* Electric Radio magazine.

Highly recommended! _The_ periodical for boatanchor operations.
Whether you are a ham or SWL, or restorer, there is something
in here for you. The classifieds alone are worth the price

of admission. Very professionally produced. Monthly.

Electric Radio Magazine
POB 57
Hesperus, CO.

* Antique Wireless Association.

Although a mixture of general old radio lore, and communications gear, there is enough good stuff in here to justify the price of \$10 a year. Very nicely produced and published! Quarterly.

[Address]

* AM Press Exchange

The "original" AM and boatanchor publication. Has been rather slim in content of late, but interesting to get if you already get E. Radio. Irregularly.

Don Chester-K4KYV
[address/cost?]

Where Do Hams Operate Boatanchors?

On CW you are likely to hear boatanchors lurking anywhere. There are probably more CW boatanchors in operation than anything else.

On AM the following frequencies frequently have AM activity, band conditions and seasonal variations withstanding:

3870-3890 Khz
7290-7300 Khz
14.286 Mhz
21.4-21.45 Mhz
29.0-29.2 Mhz

What are Typical Boatanchors and Prices?

This is a difficult one, as prices can vary from free to many hundreds of dollars. What follows is a list of popular radios and prices one would expect to see in the Electric

Radio classifieds.

Transmitters: Collins 32V Series \$175-\$400
(32V1,2 and 3)

EF Johnson Ranger	\$90-\$175
Viking I	\$75-\$150
Viking II	\$60-\$150
Valiant I,II	\$150-\$300
Viking 500	\$400-\$700

Heath	DX100	\$40-\$150 *
	Apache	\$50-\$150 *

* - Kits. Price should vary widely depending on how
it was assembled.

Receivers: Collins 75A Series \$125-\$600
(75A1, 2,3 and 4)

National HR060	\$175-\$350
National NC183D	\$100-\$175

Hallicrafters
[someone help me here with a few models/prices?]

Hammarlund HQ129	\$60-\$150
HQ150	\$75-\$150
HQ160	\$90-\$175
HQ170	\$100-\$175
HQ180	\$150-\$250

Epilog

Dont look as boatanchors as an investment. Get a real grimy specimen and clean and fix, and coax it back to life. Turn in on with the rest of the room lights turned off. As it warms up look into the insides and see the orange glow from the filaments and the purple fire from the 866's. Watch the giant S-meter come to life, and the dials emit that soft light, framed by your carefully cleaned and waxed cabinet. Rotate the knobs that are of sufficient size and layout to permit easy, flywheel smooth adjustment.

Maybe tune to the BBC on your NC183.... watch the S-meter

climb as the full audio comes out from the 6 watt output stage as you crank back the RF gain. Fiddle with a few more knobs (boatanchor operation does not need to be a passive experience) to get it set just the way you want it.

Then you'll know why boatanchors are such pleasant things to own. Like mine, your transceiver may become a very expensive frequency counter and RF generator used to align the 'Real Radios'.

From ab4el.com Wed Jun 1 12:49:23 1994
From: post@ouvaxa.cats.ohiou.edu
Subject: A couple of weird BA's

Ohio University Electronic Communication

Date: 01-Jun-1994 12:16pm EST

To: Remote Addressee
(_MX%"boatanchors@gnu.ai.mit.edu")

From: Richard Post
Services
POST

Dept: Instructional Media
Tel No:

Subject: A couple of weird BA's

Fellow heavy-metal lubbers/ luggers,

Got a couple of devices only a BA enthusiast could love. One is a rack-mounted Radiomarine Corporation of America (complete with the red RCA logo) AR 8509 - F.C.C. receiver. Panel says it covers 3-6 Mc. Has a humongous 5 Mhz crystal on the chassis. What is it, a fixed tune receiver? Does it use a V.F.O.? One of the controls "tone" connects to what looks like an IF transformer. Has 11 octal tubes. After the discussion on marine radio BA's, I figured somebody has experience with this one. Anybody want it? Have not tried to power it up. I bought it as a parts source, but it appears to be complete. Hate to mess it up if it's of use to someone else. Not everybody has a receiver with a model number ending in F.C.C.!

Ferris (Instrument Co.) Microvolter Model 18C, No. 202, Boonton, N. J.

In large black aluminum case, with meter. Covers 5 to 175 Mc's. in 7 overlapping ranges. Puts out RF signal but the 400 and 1000 hz AF modulator doesn't seem to be working. Excellent RF shielding. The only modification is a BNC for output connector. Has 3 octal tubes including rectifier and voltage regulator (it glows much prettier than those zeners). Is the third the AF modulator? Also has 2 Acorn tubes under separate shielding. Assume it is a signal generator for purists of the past. Case is in nice shape and unit is squeaky clean inside. Very well constructed. Same questions. Anybody ever use one of these? Anybody interested in it?

Rich "The cases are solid-state but the holes don't move" Post

POST@OUVAXA.CATS.OHIOU.EDU (614)593-5844 Athens, OH 45701

Received: 01-Jun-1994 12:18pm

From ab4el.com Mon May 30 19:27:01 1994
From: "Menachem Galatz DC" <mgalatz@panix.com>
Subject: AN/FRR-59A

Does anyone have experiance with the AN/FRR-59A? What kind of receiver is it, and does it compare with the R390A?

From ab4el.com Tue May 31 01:57:15 1994
From: Mark Shelhamer <ms@space.mit.edu>
Subject: Re: AN/FRR-59A

Greetings --

I have this receiver in its incarnation as the AN/WRR-2 receiving set. Made by National for the Navy, early 1960s I believe.

This thing is a real monster - about 300 lb I think. Compared to the R-390A, it is about 3 times as large. Similar type of mechanical digital frequency display, but the WRR-2 uses a synthesizer. That's right, a vacuum tube synthesizer. So the tuning is precise. There's a knob that tunes in 100 KHz steps, and another to tune in 0.5 KHz steps. Or you can turn the synthesizer off and tune continuous. It also has a drift-cancelling system so that it is stable almost from the time it is turned on.

You can receive both sidebands of an AM signal simultaneously (ISB), and

play each sideband through a speaker (you may need an audio amp for this - I use an old stereo). Then you can hear selective sideband fading, etc.

The selectivity options are minimal on SSB, but there are I think four settings on AM. Separate circuits are used for AM and for SSB demodulation, so you can't use the AM filters for SSB. No mechanical filters, alas.

I can't really say much about it's raw performance as a receiver, since I haven't done a comparison with the R-390A, or even put it on a real antenna, for that matter. I usually use it for SW broadcasts, sitting on one frequency all day.

The disadvantages? Well, I live in a third floor apartment. Even with the top and bottom assemblies out of the case and moved separately, it's still a two-person job.

But I love mine. It took a real beating getting it out of the store where I found it (an army-navy type place). It had a shorted cable, but that was about it. Worked fine, with good calibration. The synthesizer does occasionally refuse to lock, which seems to be due to a bad 6AK5.

I was able to get the service manual from the Navy publications and forms office in Philadelphia.

73 and lift with your knees,
Mark WA3YNO

PS I have a file of old e-mail from a few years ago when I posted the same question to the net that you posted. Let me know if you want to see it.

From ab4el.com Mon May 30 22:13:16 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: Andy's WANT LIST

Here are some things my local boatanchor friends and I are looking for. If you have any of these things -- or leads on them -- please e-mail me, post in this sub, or write me at

Andy Wallace
P. O. Box 395
Chelmsford, MA 01824

Nice condition is preferred but "repairable" items might be considered....

ANDY & Co.'s WANT LIST: 30 May 1994

Accessories for the HRO-50:

=====

- SOJ-3 Select-O-Ject rejection unit. Small separate grey box with interconnect cable.
- Tuning coils G, H, J, AA, AB or AC, with or without dial scales.
- HRO-50TS 10" table speaker (grey)
- NFM-83-50 Narrowband FM plug-in unit (or where I can get parts/diagram to homebrew one!)

DRAKE stuff:

=====

- HC-6/U crystals of frequencies: 11.3, 11.6, 12.1, 17.1, 18.1, 20.6, 22.6, 26.1, 28.6, 32.6, 36.6 MHz. (My SW-4A is missing all the crystals!)
- Manual for SW-4A (SW-4 might do) or schematic
- Small Drake knobs -- flat grip round knobs; common; I need 2 or 3
- 2-LF converter for 2-B receiver
- Knob and skirt for R-4A receiver. Also need dial for the same...
- junker Drake units for parts...what have you? Or possibly just PARTS!

OTHER Stuff:

=====

- Handles for an R-388: 8.5" center-to-center but NOT the same as the R-390's. These are drilled and attached from the back with countersunk screws (or so it seems).
- TMC SSB converter -- this is the small unit made to match the GPR-90, with a small dial at the center. Tabletop unit, not the CV-157 behemoth!
- Clock for HQ-170 (or 180) -- working!

-- FT-243 crystals, especially for the Novice bands

-- 1976 and 1979 World Radio TV Handbooks

= = = = = = = =

There you have it. This list is fairly small, compared to other want-lists I've seen! Can you help me to make it smaller? Thanks...

--Andy

... I remember when radios had NAMES, not just NUMBERS!

From ab4el.com Tue May 31 20:53:56 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: Andy's WANT LIST

ul> From: "PMD G.SIFAKIS" <ulowell!isoft.intranet.gr!pmdsif>

ul> -- TMC SSB converter -- this is the small unit made to match the
ul> GPR-90, with a small dial at the center. Tabletop unit, not the
ul> CV-157 behemoth!

ul> Behemoth? The thing is only an accessory to R-390 - type receivers.
ul> Don't let its weight (100 lbs) and its complexity (44 tubes) fool
ul> you.. :-)
ul> Now, that's a real boat anchor. It goes well with the 390, though.

Ugh, now I've confused myself. The "behemoth" is the huge 100 lb thing (CV-157, right?) with the two meters on the panel, for RTTY and probably crypto patching with the 390. About the same size cabinet. THAT may or may not have been made by Technical Materiel Corp. But I do know TMC made a small (maybe 5" high rackmount) unit that I've seen paired with 390As, that had two small USB and LSB lights on the panel. (Gee, I wouldn't mind one of those myself.)

But before my friend let me fix his GPR-90 bandswitch, he bought an R-2000 Kenwood. Several years of SW Broadcast DX and images later, he bought a Drake R-8, and I finally fixed the GPR-90. Anyway -- it would be kinda nice to surprise him with that little tabletop GPR sideband unit that I saw advertised in an old ARRL handbook. <grin>

Thanks for the reply!

--Andy

... Bring back the Drake 4-line paint and cabinet scheme! :-)

From ab4el.com Tue May 31 03:43:25 1994
From: "PMD G.SIFAKIS" <pmdsif@isoft.intranet.gr>
Subject: Re: Andy's WANT LIST

-- TMC SSB converter -- this is the small unit made to match the GPR-90,
with a small dial at the center. Tabletop unit, not the CV-157
behemoth!

Behemoth? The thing is only an accessory to R-390 - type receivers. Don't
let its weight (100 lbs) and its complexity (44 tubes) fool you.. :-)

Now, that's a real boat anchor. It goes well with the 390, though.

George, SV0KA

From ab4el.com Wed Jun 1 09:37:23 1994
From: "Kasprzyk, Emil" <EFK@eng2.tracor.com>
Subject: Andy's wish list

Some of our people must be sleeping (old age?). What Andy wants is a
CV-591. There is also a later version , CV-1XXX , can't recall the exact
number but both manuals are available from Fair Radio.

CV-157 is very useful for holding down mobile home radio shacks during
tornadoes.

73 de Emil, KC5IZ

From ab4el.com Wed Jun 1 22:46:58 1994
From: Fire Bottle archive handler <firebotl@jackatak.raider.net>
Subject: Andy's wish list

> Some of our people must be sleeping (old age?).
Overdose of prunes, maybe?

> What Andy wants is a CV-591.
REALLY? I have TWO (I think)... they were last seen when we moved here
a few years ago...in the back corner of the garage. If that is what
you want, Andy (and if someone else wants them worse, your email had
better beat out Andy's by a day or so ;) let me know and I will dig
til I find them... I sold my last R-390A long ago, and the chap had no
interest in the SSB Converter...

> both manuals are available from Fair Radio.
That's good, because I have NO manuals... and one of the CV-591s is a

parts dealie, not even cosmetically attractive... both or none
73,
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

Fire Bottle Server (Boat Anchors Get Out and Keep You Warm!)
firebotl@jackatak.raider.net
Where Old Radios and Fun ... GO TOGETHER!
+-----human interface: root@jackatak.raider.net -----+

From ab4el.com Thu Jun 2 02:27:05 1994
From: Fire Bottle archive handler <firebotl@jackatak.raider.net>
Subject: Andy's wish list

> Some of our people must be sleeping (old age?).
Overdose of prunes, maybe?

> What Andy wants is a CV-591.
REALLY? I have TWO (I think)... they were last seen when we moved here
a few years ago...in the back corner of the garage. If that is what
you want, Andy (and if someone else wants them worse, your email had
better beat out Andy's by a day or so ;^) let me know and I will dig
til I find them... I sold my last R-390A long ago, and the chap had no
interest in the SSB Converter...

> both manuals are avaiiable from Fair Radio.
That's good, because I have NO manuals... and one of the CV-591s is a
parts dealie, not even cosmetically attractive... both or none
73,
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

Fire Bottle Server (Boat Anchors Get Out and Keep You Warm!)
firebotl@jackatak.raider.net
Where Old Radios and Fun ... GO TOGETHER!
+-----human interface: root@jackatak.raider.net -----+

From ab4el.com Wed Jun 1 09:58:56 1994
From: rdkeys@csemail (R. D. Keys)
Subject: Re: Andy's wish list

>
>
> Some of our people must be sleeping (old age?). What Andy wants is a
> CV-591. There is also a later version , CV-1XXX , can't recall the exact
> number but both manuals are avaiiable from Fair Radio.
>
> CV-157 is very useful for holding down mobile home radio shacks during

> tornadoes.
>
> 73 de Emil, KC5IZ
>

Back in the tornado of November, 1988, which struck Raleigh, NC and essentially levelled my place, the rackmount dual-diversity rtty converter (number not remembered but it was the old army one that went with the BC-610, and was HUGE) was one of the few things that remained essentially in place. The rest of the storage barn was spread out like the debris field from the Titanic.

There is something to be said for sufficient mass and size in boatanchors such that they do not walk away in tornadoes..... (:+{} }.....

73 TU SU SK DE NA4G Bob

From ab4el.com Wed Jun 1 11:21:17 1994
From: "Menachem Galatz DC" <mgalatz@panix.com>
Subject: Re: Andy's wish list

In an old Fair Radio Sales catalogue I see a CV-1982/TSC-26 SSB Converter for receivers with a final 455 KHZ IF. 29lbs. For R390A or SP600 receivers.

Can such units be used with a R390A for exalted carrier receiving?

>
>Some of our people must be sleeping (old age?). What Andy wants is a
>CV-591. There is also a later version , CV-1XXX , can't recall the exact
>number but both manuals are available from Fair Radio.
>
>CV-157 is very useful for holding down mobile home radio shacks during
>tornadoes.
>
>73 de Emil, KC5IZ
>

From ab4el.com Tue May 31 09:44:22 1994
From: lakeith@wrdis01.robins.af.mil (CONTRACTOR Larry Keith;653 CCSG/SCT)
Subject: ART-13 Crystal Control Unit?

While cleaning out the garage, I came across a crystal control unit

for an ART-13. It has a 4 position switch, an "A/B" switch, and a VFO/XTAL switch. One tube (??) is missing and one miniature tube is in place. No crystals.

Evidently, the unit plugged into the ART-13, and replaced the little panel with the nameplate. However, the one ART-13 unit that I have, does not have matching sockets for the crystal control unit.

Anyhow, my question is: Were there other versions of the ART-13 that included the the crystal control unit? Or, was there a modification that had to be done to install this unit?

73,

Larry, KQ4BY

From ab4el.com Mon May 30 04:23:03 1994
From: "PMD G.SIFAKIS" <pmdsif@isoft.intranet.gr>
Subject: ART-13, BC-348

I can only confess it to this list: I finally decided I can't live without an ART-13. So, before I hit Fair Radio, is there any available in BA-land?

Second, I'd like to get the companion receiver which is I believe BC-348. Now, I can easily get my hands on a BC-312 that looks pretty much the same, but is it really? Anyone know the difference between the two?

George Sifakis SV0KA
pmdsif@isoft.intranet.gr
Athens, Greece

From ab4el.com Mon May 30 19:10:40 1994
From: rdkeys@csemail (R. D. Keys)
Subject: Re: ART-13, BC-348

>
> I can only confess it to this list: I finally decided I can't live without
> an ART-13. So, before I hit Fair Radio, is there any available in BA-land?
>
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> Now, I can easily get my hands on a BC-312 that looks pretty much the
> same, but is it really? Anyone know the difference between the two?
>
> George Sifakis SV0KA
> pmdsif@isoft.intranet.gr
> Athens, Greece

>
>

George.... Both receivers are very comparable specifications-wise.

Detail-wise, both are very different in the fine points.

BC-312

The BC-312 is a single conversion superhet with crystal filter on some models that runs with a 12 volt dynamotor (14v) or a 110 volt ac supply internally. The BC-314 is a low frequency model of the same basic design. The BC-342 (BC-344) is the AC version with crystal filter.

The basic design was drawn up in the Signal Corps radio laboratories at Ft. Monmouth, NJ in the late 1930's. It was heavily made with a steel cabinet and shock mounts, for use in mobile vehicular or ground radio installations. The transmitter was the venerable BC-191 MOPA set that was supposedly designed by GE in 1935 (actually it was copied from an earlier RCA aircraft design dating from 1930 --- I can supply data substantiating this but don't have it with me).

Many hams put the 110v power supply into it after the war, so dynamotor models are a bit scarce. The rig is satisfactory either way, although I prefer running it on dynamotors.

The design used a 470khz(?) IF and covered a frequency range of 1.5-18mhz. The audio is pretty potent and can drive suitable speakers well (like the LS-4).

BC-348

The BC-348 is a single conversion superhet with crystal filter on all models that runs with a 28 volt dynamotor.

The basic design was by RCA(??) in the late 1930's as an aircraft receiver. It was made of very light aluminum construction with standard shockmount for aircraft use. The transmitter was the aircraft version of the ground 100 watt MOPA transmitter (BC-191) known as the BC-375. Hence the

equipment that the receivers were used with was very similar.

Many hams ruined BC-348's by putting in ac power supplies. They usually ran 250 or more volts on the plates which kills BC-348s (normal plate voltage is 220 volts). A 28 volt power supply is EASY to come up with but for some reason (screwy at the time) the hams never did use 28 volts most of the time in the 40's, 50's and 60's. Now 28 volt power supplies are a dime a dozen. WATCH YOUR PLATE VOLTAGES IN BC-348 RECEIVERS!

The basic design used a 915khz IF and covered a range of 190-550khz, and 1.5-18 mhz. The audio on the BC-348s is weak and designed for headphone use only.

Comments:

1. For my personal preference, the BC-312 is a better receiver for CW. I have used both for almost 25 years, and my preference is for the BC-312 for actual operating. The dials are a bit looser than on the BC-348's, but that is not much of a problem. The gear tolerances are a bit wider than that on the BC-348. These findings are based on my personally running about 5 of each type over the years.
2. For ease of use, the BC-348 runs better on batteries or a quiet 28 volt power supply. The AC power supplies on the BC-312 get quite hot and are known to burn out the filter caps, quite often. Transformers are rated marginally. Be careful not to run on 120 volts --- because if your line voltage is high, you may burn the power supply up.
3. For ruggedness, I would choose the BC-312 --- they are built like a brick outhouse.
4. For ease of servicing, I would choose the BC-312 --- they are much simpler to work on, and the parts seem to be more rugged. The wiring insulation is poorer than on the BC-348. The bandswitch arrangement on the BC-348 is tricky and subject to not aligning correctly if you ever have to take it apart. The ruggedness of the BC-312 makes it a bit more immune to this problem. The cases on the BC-312 are stiffer. There are fewer models of BC-312 to worry about detail changes, than compared to the BC-348. There were about 10 different models with significant minor changes in the BC-348 series (probably because of the plethora of different manufacturers using whatever parts were available during the critical early wartime periods).
5. The BC-348 connectors are scarce as hen's teeth. Most folks take

the dastardly tack and put an octal socket therein in place of the 8 pin blade socket (YECCHHHH!). The BC-312 does not require connectors, since the wiring is all internal on the AC models. But, the front panel connectors for DC powered BC-312's are also as scarce as hen's teeth. Good luck finding original connectors.

6. Most true unbelievers of Boatanchordom trash the front panel connectors for antenna and ground on their BC-348's (BC-312s usually had the connector with the set, although most hams have long thrown them away and likewise butchered the front panels to death). A proper restoration of the original connectors is extremely difficult because you have to rebuild the aluminum around the connector insulators (unless you are a competent aircraft sheetmetalman, you won't know what you are doing). But, if yours is already trashed, then use whatever antenna and power inputs you can muster that will meet your requirements.

Any other Boatanchorites like to add some comments?

73 TU SU SK DE NA4G
Bob

From ab4el.com Tue May 31 12:50:30 1994
From: "Kasprzyk, Emil" <EFK@eng2.tracor.com>
Subject: Attn: Terry O.

Your manual was mailed to you on Saturday morning by the 2 lb., 2 day, \$2.90 U.S.P.S. method. I feel you should have it no later than Wednesday, June 1.

Emil

From ab4el.com Tue May 31 20:51:33 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: BA FAQ/ Drake manuals

FROM: ulowell!jackatak.raider.net!root

ul> R. L. Drake Company
ul> 230 Industrial Drive
ul> Franklin, OH 45005
ul> tel 513-746-6990
ul> Drake product manuals only.

I never realized that Drake would carry manuals, but of course

this makes sense... <grin> Are these photocopies, or reproductions of the originals? What are the prices like?

BTW that was an excellent FAQ -- I'll read it more at leisure.
May I cross-post that to FidoNet or my Tube Chat sub?

--Andy

... Marauders and Comanches battle Vikings and Apaches! Film at 11!

From ab4el.com Wed Jun 1 00:10:55 1994
From: fmittchell@rdccclink.rd.qms.com
Subject: ba questions for the day...

ok, ba'ers, here's the questions of the day...

"Who was Hogarth?" ... and "What did he say?"

this questions relates to a recent thread... that's all the tip i am giving you... (but see below)...

prize for the first correct answer is a free afternoon of dumpster diving at zieman's marine salvage yard, prize for the second correct answer is an afternoon touring the radio rooms of the battleship uss alabama and the submarine uss drum, f.o.b. mobile, alabama, of course...

mitch
wa4osr

ps... answer is on catalog page 66, arrl hb, 194(x) edition... and you are automatically disqualified from receiving the prizes if you have to peek at the answer...

```
-----+-----
*** I collect bugs (mostly Vibroplex) and keys! ***
S. Felton Mitchell, Jr. | WA4OSR DX Cluster Sysop
11 Midtown Park, E. | Email: fmittchell@rd.qms.com
Mobile, AL 36606-4141 | WA4OSR@W4IAX.#MOBAL.AL.USA.NA
205-342-7259 home | 205-476-4100 Work
-----+-----
```

From ab4el.com Thu Jun 2 16:24:52 1994

From: don merz <71333.144@CompuServe.COM>
Subject: BA Voyeurism...

My ads and activity have attracted a number of strange responses over the two years I've been doing this. Here's the latest: About a month ago, a guy sent me a VHS tape with no note or explanation. The return address was someone I've never heard of. Naturally, being the curious sort (and secretly hoping for something good....) I threw in the tape and pressed PLAY.

Well, this guy has a house full of stuff--and I mean a house full. It is mostly all test equipment of the finest makes and models. There is some radio gear including a set of brand-new looking ARC-38A Collins transceivers. His narration suggested that he wanted to sell this stuff but it was all pretty vague. I was interested in an obscure piece of radio gear he showed so I wrote him a letter.

He called me and we talked it over and I am probably going to pick up this odd BA I was after. But when I asked him what I should do with the tape, he asked me to pass it along to someone else who might see something they're interested in.

And that's the question: Does anybody on the list want to peruse this thing? Let me know and I'll send it along.

From ab4e1.com Wed Jun 1 18:13:36 1994
From: post@ouvaxa.cats.ohiou.edu
Subject: ballast substitution

Ohio University Electronic Communication

Date: 01-Jun-1994 05:35pm EST

To: Remote Addressee
(_MX%"boatanchors@gnu.ai.mit.edu")

From: Richard Post
Services
POST

Dept: Instructional Media
Tel No:

Subject: ballast substitution

Speaking of ballasts, was working on an AC-DC mid 1930's Emerson DM-331 AM/SW (to 6.5 MHz), 5 tubes plus ballast series-string set. Schematic is in Rider 10. Did not have the missing number 49 ballast

tube. I replaced the missing ballast with a 15 ohm resistor (in parallel with the pilot lamp) and a 60 watt chandelier bulb mounted on an octal tube base. (Soldered the resistor and a bulb socket to the tube base.) Brought it up slowly with a variac. Voltage drop on the bulb measured about 53 volts under load. The drop was about right since the #49 refers, I believe, to the the voltage drop carried by the ballast in this particular series string. The bulb glows nicely when the sets plays (rather well considering the vintage and cheap circuit.) The reason for the bulb as a ballast rather than a large resistor is apparent when you turn on the set at a cold start. The bulb flares up and then settles down to its glow. It absorbs the rush of current to the cold tube filaments. The theory has already been covered nicely. (Hey, I even liked Jim Kearman's theory!) I would rather the bulb flare than the expensive-to-replace tubes.

By the way the bulb wattage was chosen by experimentation. (Variacs come in handy.) This particular bulb is rated at 130 volts for full wattage. The purists can mount one of these in a perforated metal cover such as accompanied many ballasts.

Rich Post

"This one REALLY glows in the dark."

POST@OUVAXA.CATS.OHIOU.EDU (614)593-5844 Athens, OH 45701

Received: 01-Jun-1994 05:40pm

From ab4e1.com Wed Jun 1 12:05:34 1994
From: "Kevin Anderson" <GGANDERSON@Augustana.edu>
Subject: ballast tubes?

Boatanchor gang,

Periodically my ignorance cries out to be heard and
appeased. This time my BA lesson to learn is:

What is a ballast tube? What are they used for?

My vague impression is that either they are designed to
present a load of particular amount on a system or they are
some sort of vibrator/power regulator.

Thanks. 73 de kevin, kb9iua

From ab4el.com Wed Jun 1 12:54:32 1994

From: rdkeys@csemail (R. D. Keys)

Subject: Re: ballast tubes?

>
> Boatanchor gang,
>
> Periodically my ignorance cries out to be heard and
> appeased. This time my BA lesson to learn is:
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> What is a ballast tube? What are they used for?
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> My vague impression is that either they are designed to
> present a load of particular amount on a system or they are
> some sort of vibrator/power regulator.
>
> Thanks. 73 de kevin, kb9iua
>

A ballast tube is a fancy glass enclosed resistor. That is all it is.

The reality of use of a ballast tube is that most are used as series current limiting resistors in such things as filament strings in receivers with all the tubes series connected, filament lines in the HF oscillators (the variable one used for tuning) in many Navy and commercial receivers of the WWII and late vacuum tube era that required very precise HF conversion oscillators with a high degree of stability), and the filament lines in RF generator oscillators of certain late vacuum tube era transmitters or transmitting component subassemblies use in big rackmount boatanchors (again, where a precise and highly stable oscillator tube was needed). The net effect was to limit current and voltage on the filaments by placing a big resistor in series with the filaments. On some commercial marine receivers, such as the RMCA AR-8506B, a ballast tube is not used but a standard vitreous enamel power resistor is used to drop the filament voltage from 115 VDC ships line to 96 volts DC required for the filament string. In this particular case, the resistor acts as a heater to prevent moisture from building up and condensing on the innards of the receiver in humid marine environments.

Once in a while, in military rigs of the late WWII and Korean era, they were used in filament strings of battery tubes used on variable voltage power supplies that needed to run on 6/12/24 volts. In this case, the tubes were used merely to drop the voltage and current to the required values for the battery tubes used. This function is typified by the AN/GRC-5,6,7,8,9,10,11,12,13,14 etc., sorts of things that covered jeep or command car or tank mounted vehicular and portable or ground type radio sets of 20-74 mhz range (the AN/GRC-5 was a general purpose HF

receiver and was the exception).

Most of the time, you can replace the ballast tube with suitable resistances, with absolutely no consequences other than trying to mount a sufficient resistor in place of the tube (not easy to do since the tubes can be run quite warm in tight places). The alternative that is sometimes done is to wire around and not use the ballast tube and run the filaments directly off of a low voltage supply of appropriate value. The Navy RBB/RBC receivers use a ballast tube in the HF oscillator string, and, to allow one to run the oscillator filament on 6.3 volts rather than 18 or 36 volts (don't remember which right off), the thing is just bypassed and run to the filament voltage. The net effect is a slightly less stable oscillator that requires more warmup in amateur use (OK generally). The AN/GRC-5 can run off of 1.5 volts DC filament and 90 volts battery rather than the vibrator or AC supply.

Any other Boatanchorites have additional comments?

73 TU SU SK DE NA4G

Bob

p.s. Finding the right replacement ballast tube if one is missing or burned out can be a bit of a problem, since they tend to be scarce and usually overpriced unless found in the boxes under the table at the hamfest.

From ab4el.com Wed Jun 1 13:29:47 1994

From: "Kearman, Jim" <jkearman@arrl.org>

Subject: RE: ballast tubes?

Kevin Anderson asks:

>What is a ballast tube? What are they used for?

Ballast is used in ships to increase displacement when the cargo hold isn't fully loaded. The ballast serves to keep the ship balanced and ensures the waterline on the hull is indeed at the surface of the water. Otherwise, passengers and crew would see how rusty and barnacle infested the hull is and refuse to board.

Large ships require large anchors, of course. The anchor is stored in the front of the ship, usually, although there may be stern anchors as well. Some of the ballast weight is required to offset the weight of the

anchor(s).

In a large, vintage radio ("boatanchor"), the ballast tube is where surplus electrons are stored, to counteract the weight of transformers, chokes and other heavy metal objects on the chassis. Even a relatively lightweight boatanchor like the Zenith Transoceanic has a ballast tube.

Over the years, electrons rush into and out of the ballast tube, causing it to weaken and require replacement. It's important to use the right replacement ballast tube. Putting the ballast tube from a big radio into a Transoceanic could cause the chassis to become unbalanced, and result in the radio rearing up and sliding off the table.

I hope this explanation furthers your understanding of radio and electronics.

73

Jim, KR1S

From ab4el.com Wed Jun 1 14:05:23 1994
From: steve@hi.com (Steve Byan)
Subject: Re: ballast tubes?

Thanks to R. D. Keys for the ballast tube explanation. I still don't get one or two points, though...

Regarding VFO stability - does the ballast tube use a positive temperature coefficient resistance characteristic to regulate the filament voltage for the VFO, or is it just that the source voltage is enough higher than the filament voltage that the dropping resistor is large enough to look like a constant-current source?

Regarding 6/12/24 volt boatanchors - is there a separate ballast tube for each voltage with a voltage-selector switch, or can a single ballast tube compensate for such an extreme input voltage variation?

Thanks,
-Steve

Steve Byan (steve@hi.com)

From ab4el.com Wed Jun 1 14:07:14 1994
From: "Roy Morgan" <morgan@speckle.ncsl.nist.gov>
Subject: Re: ballast tubes?

On Wed, 1 Jun 1994 10:23:00 CDT,

Kevin Anderson <GGANDERSON@Augustana.edu> wrote:

>What is a ballast tube? What are they used for?

>

>My vague impression is that either they are designed to
>present a load of particular amount on a system ...

The characteristic of ballast tubes not mentioned by Bob Keys is their positive temperature coefficient. Simply put, when the supply voltage goes up, (and along with it the current) the resistance goes up so as to mostly compensate for the increased current.

Tubes perform in the most stable manner with constant heater POWER. That means that as the tube ages, and its filament hot resistance increases (due to loss of metal in the heater), it's total filament power would decrease if the filament supply voltage was constant. The decreased filament current is compensated for by the decreased heat dissipated by the ballast tube and the resulting reduced ballast resistance, and so the tube filament power is held quite constant. There is a corresponding cause-and-effect relationship with varying filament supply voltage.

Ballast tubes are specified as to the range of both voltage and current they operate at, as well as the coefficient of the interaction between these two.

Replacing the ballast tube, in an R-390, for example, with a constant voltage supply (dare I say it: solid state) is a not-bad approximation towards meeting the design goals. But it would only go part way toward the ballast's effect. The story is that the Army specs for the receiver demanded a ballast tube against the good judgement of the design engineers: they felt that it simply was not needed to meet the performance specs for stability.

The R-390 saw service under some or all of the following conditions:

- Ship, shore, mobile comm huts, jungle to arctic, or wherever
- Power fluctuating from 85 volts to 140 at random intervals
- Set frequency once for RTTY, and leave it for months (literally)
- Overhaul and calibration only when it quits, or at irregular intervals at best.
- (And so on ...)

How many of us run them like that?

Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899
301-975-3254 Fax: 301-948-6213 Internet: morgan@speckle.ncsl.nist.gov

From ab4el.com Wed Jun 1 14:16:33 1994
From: "Rhett T. George" <rtg@ee.duke.edu>
Subject: Re: ballast tubes?

The ballast tubes I remember were used in receivers and were resistors, perhaps several in one envelope. Inside of the glass envelope was an opaque light to medium gray. In the pre honesty-in-advertising days this could up the tube count as well as keep the chassis underside cooler.

Rhett George

From ab4el.com Wed Jun 1 14:36:59 1994
From: rossi@VFL.Paramax.COM
Subject: RE: ballast tubes?

->Kevin Anderson asks:

->

->>What is a ballast tube? What are they used for?

->

->Ballast is used in ships to increase displacement when the cargo hold
->isn't fully loaded. The ballast serves to keep the ship balanced and
->ensures the waterline on the hull is indeed at the surface of the water.
->Otherwise, passengers and crew would see how rusty and barnacle
->infested the hull is and refuse to board.

->

->Large ships require large anchors, of course. The anchor is stored in
->the front of the ship, usually, although there may be stern anchors as well.
->Some of the ballast weight is required to offset the weight of the
->anchor(s).

->

->In a large, vintage radio ("boatanchor"), the ballast tube is where surplus
->electrons are stored, to counteract the weight of transformers, chokes and
->other heavy metal objects on the chassis. Even a relatively lightweight
->boatanchor like the Zenith Transoceanic has a ballast tube.

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->Over the years, electrons rush into and out of the ballast tube, causing it
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->replacement ballast tube. Putting the ballast tube from a big radio into a
->Transoceanic could cause the chassis to become unbalanced, and result
->in the radio rearing up and sliding off the table.

->

->I hope this explanation furthers your understanding of radio and

->electronics.
->
->73
->
->Jim, KR1S

Check your calendar. It's June 1st, not April! :-)
^^^^

Pete Rossi - WA3NNA
rossi@vfl.paramax.com
Unisys Corporation - Government Systems Group
Valley Forge Engineering Center - Paoli, Pennsylvania

From ab4el.com Thu Jun 2 03:12:28 1994
From: "PMD G.SIFAKIS" <pmdsif@isoft.intranet.gr>
Subject: RE: ballast tubes?

> In a large, vintage radio ("boatanchor"), the ballast tube is where surplus
> electrons are stored, to counteract the weight of transformers, chokes and

For the younger, computer-literate generation to understand Jim's
explanation of a ballast tube, the computer equivalent is the well
known "Bit Bucket". The Bit Bucket is used in networks to catch
the bits that leak out when the coax cables make very sharp turns.

George SV0KA

From ab4el.com Thu Jun 2 10:27:42 1994
From: "Roy Morgan" <morgan@speckle.ncsl.nist.gov>
Subject: RE: ballast tubes?

On Thu, 2 Jun 94 09:37:23 +0300,
PMD G.SIFAKIS <pmdsif@isoft.intranet.gr> wrote:

>> In a large, vintage radio ("boatanchor"), the ballast tube is where surplus
>> electrons are stored, to counteract the weight of transformers, chokes and
>
>For the younger, computer-literate generation to understand Jim's
>explanation of a ballast tube, the computer equivalent is the well
>known "Bit Bucket". The Bit Bucket is used in networks to catch
>the bits that leak out when the coax cables make very sharp turns.

George S's explanation of the bit bucket analogy didn't mention a very
pervasive but little-recognized cause of lost electrons: poor coax

shielding.

Most coax shielding has less than 100% shielding. In fact, complete specifications on a coax will tell what the percentage is. (Cable tv cable is quite good, by the way.) What happens is that the electrons fly out through the small gaps between the strands of the braid, and go whizzing right through the vinyl jacket.

As I understand it, any electrons which have been through the ballast tube are reduced in their ability to whiz through gaps, so you get more of the signal through the coax.

Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899
301-975-3254 Fax: 301-948-6213 Internet: morgan@speckle.ncsl.nist.gov

From ab4el.com Thu Jun 2 11:55:51 1994
From: Joe Reda/HQ/3Com <Joe_Reda/HQ/3Com@3mail.3Com.COM>
Subject: Re: ballast tubes?

>
> Boatanchor gang,
>
> Periodically my ignorance cries out to be heard and
> appeased. This time my BA lesson to learn is:
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> What is a ballast tube? What are they used for?
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> My vague impression is that either they are designed to
> present a load of particular amount on a system or they are
> some sort of vibrator/power regulator.
>
> Thanks. 73 de kevin, kb9iua
>

The ballast tube you hear the most about is the 3TF7, used in the R-390 and R-390A. It's still being made by Amperite and the cost of a new one is \$150!!!!!! There are two excellent published replacement circuits for this ballast tube that I know of. Both are relatively easy, plug-in circuits and do the job better than the tube.

\\JR KC6TXU

From ab4el.com Thu Jun 2 12:09:07 1994

From: "Mark Glusker" <glusk@mechcad3.esd.sgi.com>
Subject: Re: ballast tubes?

On Jun 2, 8:27am, Joe Reda/HQ/3Com wrote:
> Subject: Re: ballast tubes?

> The ballast tube you hear the most about is the 3TF7,
> used in the R-390 and
> R-390A. It's still being made by Amperite
> and the cost of a new one is \$150!!!!!! There are two
> excellent published
> replacement circuits for this ballast tube that
> I know of.

If you are a stickler for authenticity, Fair Radio Sales has NOS 3TF7's
for \$17.50 each. I believe this is the cheapest readily available source
(please correct me if I'm wrong) however, it may not last long.

From ab4el.com Thu Jun 2 12:11:21 1994
From: Joe Reda/HQ/3Com <Joe_Reda/HQ/3Com@3mail.3Com.COM>
Subject: RE: ballast tubes?

Indeed . . . I work at 3Com ("Networks that Go the Distance"!!!!) and we're
always having problems with raw Ethernet
leakin' out all over the place!

----- Previous Message

To: GGANDERSON @ Augustana.edu @ UGATE
boatanchors @ gnu.ai.mit.edu @ UGATE
jkearman @ arrl.org @ UGATE
cc:
>From: pmdsif @ isoft.intranet.gr ("PMD G.SIFAKIS") @ UGATE
Date: Thursday June 2, 1994 09:37 AM
Subject: RE: ballast tubes?

> In a large, vintage radio ("boatanchor"), the ballast tube is where surplus
> electrons are stored, to counteract the weight of transformers, chokes and

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explanation of a ballast tube, the computer equivalent is the well known "Bit Bucket". The Bit Bucket is used in networks to catch the bits that leak out when the coax cables make very sharp turns.

George SV0KA

From ab4el.com Thu Jun 2 12:27:13 1994
From: "Peter G. Smith" <n4zr@netcom.com>
Subject: RE: ballast tubes?

We're up to our knees in 'em here. Worst part about it is the static cling!

73, Pete
n4zr@netcom.com
N4ZR@N4OHE (PacketCluster)

2003 Sarazen Pl.
Reston, VA 22091

From ab4el.com Wed Jun 1 14:12:50 1994
From: mallick@ausable.crd.ge.com (John Mallick)
Subject: RE: ballast tubes? From: "Kearman, Jim" <jkearman@arrl.org> Date:
Wed, 01 Jun 94 13:01:00 EDT Encoding: 34 TEXT X-Mailer: Microsoft Mail V3.0

Kevin Anderson asks:

>What is a ballast tube? What are they used for?

...

In a large, vintage radio ("boatanchor"), the ballast tube is where surplus electrons are stored, to counteract the weight of transformers, chokes and other heavy metal objects on the chassis. Even a relatively lightweight boatanchor like the Zenith Transoceanic has a ballast tube.

...

I hope this explanation furthers your understanding of radio and electronics.

73

Jim, KR1S

This sounds like part of a new "Wally and Mike" story... :-)

73,

John WA1HNL

From ab4el.com Thu Jun 2 02:39:48 1994
From: CHRIS _ PRUSSING <RMCP@tundra.alaska.edu>
Subject: BAs and D-Day+50

Hi group-

Now I'm not known as a flag-waving type or a sentimentalist, but in the wake of recent waxings poetic about boatanchors here on the list I thought I would share how we can insure some wider knowledge and appreciation of these glow in the dark boxes and the people who they served well as life saving tools.

We use BAs as interest pieces in our computer/AV store in downtown Juneau AK. There's an Sx-25 with big metal PM-23 speaker. an RCA R-5 Cathedral, Delco deco, Philcos, Western Auto Truetone with Magic Eye, an HRO-5. People like them and we are always tuning in something for someone on one or the other. People buy them for their office, stores, even.

This week and last, in a not very specific observbance of Armed Forces Day and Decoration/Remembrance Day as it is still known by our older neighbors we tuned in some Edward R. Murrow/ H.V.

Kaltenborn WWII news reports (lots of Bc stations are running D-Day+50 specials through this week) using a Zenith phono oscillator (carrier current transmitter). The old rigs came to life, and so did the passersby in the store. Everybody of almost every age had a story about themselves, their parents, their grandfather and The War. The Radio was what brought them all together. Even the young Filipino crewmembers from the cruise ships told about their grandparents and the Japanese Occupation and McArthur and Liberato... Well, you get the idea...Put one of those old relics out where more than just this little list group can appreciate them and a part of the past they can bring to life. Just remember to glue the knobs on.

Jim Dillon RMCP@Tundra.Alaska.Edu

From ab4el.com Tue May 31 16:55:48 1994
From: klaudon@PICA.ARMY.MIL
Subject: BC-312

My father, ex-W2VXL, used a BC-312 and ARC-5 xmtr on 40m CW after WWII ended (and after he had been discharged; he lied about his age to get in the Navy, and when they finally found out, he was already stationed on

Bikini Atoll (BEFORE they nuked it); they kicked him out but still with an honorable discharge). He said he bought the 312 brand new. He remembers that it cost \$ 45. He said that the receiver was too wide for CW use; he built his own filter arrangement, because even in those days, it would have cost around \$ 150 to obtain a narrow crystal filter. That sounds expensive, even for those days, but that's what he told me recently. I guess NYC prices were expensive, even then.

He removed the dynamotor and installed a homebuilt AC supply. He ran a half-wave Zepp on top of their Bronx apt. building, fed with homemade 600 ohm tuned ladder line. When he saw my 450 ohm plastic-insulated, store-bought feedline, he scoffed at it and dismissed it out of hand.

I guess some people can't accept Progress. (:+)####

Kalman Laudon
WD6CZI in 2-land
klaudon@pica.army.mil

p.s. he once told me that his antenna had been cut down (was TV even around then, for TVI to be a big problem?) several times. But he got married in 1951, and that meant QRT for good. He was more interested in audio, anyway. Sheesh.

From ab4el.com Tue May 31 17:46:54 1994
From: rdkeys@csemail (R. D. Keys)
Subject: Re: BC-312

> He said that the receiver was too wide for CW use; he
> built his own filter arrangement, because even in those days, it would have
> cost around \$ 150 to obtain a narrow crystal filter.

Depending upon the model, some had xtal filters and some did not. I will try to remember to check my books tonight and see. The AC versions always had xtal filters, but some of the DC vehicular models did and many others did not. Generally earlier models of the 312 at the very beginning of the war or even pre-war had xtals but because of quartz shortages, early on, they decided to drop xtal filters in mobile gear where it was not really needed. Fixed station gear (as in the 342 models) usually always had xtal filters.

Mine has the xtal filter and is quite reasonable for a 50 year old single conversion superhet design on CW. As most of us should know on CW, with the old boatanchors, the trick was to run the audio up almost all the way (until the noise floor jumped up about what was comfortable to the ears), then use the RF gain control for the gain

control throughout. That way the filter was not stressed (or the IF for that matter if there was no filter installed). With the filter the bandpass is about 1kc (wide but acceptable, and due as much to stray capacitance in the old bakelite xtal holder). Without the filter the bandpass is about 3kc for -6db. Par for 50 year old communications gear. If you used good tin cans, and carefully loosened the lids to allow the diaphragms to resonate at their base frequency, you could make a fine audio filter out of just tin cans. Others often chose to use the beam filters that were commonly available at the time, although their insertion loss was quite high.

>

> He removed the dynamotor and installed a homebuilt AC supply.

Darn.... I wish I still had a dynamotor to fit back into mine..... (:+{f...

> I guess some people can't accept Progress. (:+)####

What good is ``progress'' if the old gear still functions as good or better than the newer overly fancy stuff. On CW it does not really matter..... cw has been the same since 1915 or thereabouts, when the first transmitting tubes came aboard (discounting arc gear or synchronous multiple timed spark gear by Marconi prior to that). On SSB it really does not matter, since SSB has been around since 1921 (although only practically in ham circles since 1948 or so). It can matter on a few newer modes like HF packet where stability requirements are rather tight.

> Kalman Laudon

> WD6CZI in 2-land

> klaudon@pica.army.mil

>

Bob

NA4G

Gee..... aren't boatanchors and their lore fun.....! (:+{f}.....

From ab4el.com Wed Jun 1 09:48:52 1994

From: Nick England <nick@cs.unc.edu>

Subject: Re: BC-312

>From dim memories as a novice with my first *real* receiver, I remember something about the IF coils being overcoupled with a loop inside the

IF can and if you remove this loop you can sharpen things up ??
This was on some BC-348 model but I don't know if it applies to
the 312 or what.

Nick

From ab4e1.com Thu Jun 2 14:29:19 1994
From: Kevin E. Schmidt <w9cf@ptolemy.la.asu.edu>
Subject: Big Crystals

I deleted the message from the person who wanted crystals with 3/4 inch
pin spacings. Last night on the West Coast AMI net, a fellow listed, on
the swap portion, some HC2/A (I think, the static was pretty bad)
crystals for either 80 and 40 or 80 and 75. He said they had a 3/4 inch
pin spacing. He said to call him to discuss price. I have his
name/call/phone number written down at home.

So let me know who you were and I will send you the info if you are
still interested.

Kevin

=-----
Kevin Schmidt w9cf@ptolemy.la.asu.edu
Department of Physics and Astronomy
Arizona State University, Tempe, AZ 85287-1504
(602) 965-8240
(602) 965-7954 (FAX)

From ab4e1.com Thu Jun 2 11:54:22 1994
From: ryme@wpsmtp.bloomu.edu
Subject: Bit Buckets

Bit buckets on coax? Never had that "loose electron" problem with
coax.

However, I do keep grounded bit buckets under my computer serial
ports. You could accidently send out a data stream through an
unconnected serial port! At high speed (19.2K or higher), just a few
seconds of unpiped data stream will spray electrons all over
everything in sight.

Oh brother, those electrons get into the rug, the drapes, and they
are a b*#\$h to get out! Take it from a guy who has had to clean up
this style of mess. You DON'T want to try it at home! {;^)

with bit bucket in hand and tongue in creek,
John Rymell

From ab4e1.com Mon May 30 14:39:21 1994
From: rdkeys@csemail (R. D. Keys)
Subject: Boatanchors FAQ

Several months back there was a boatanchors FAQ posted here.

I saved a copy but alas nuked it recently.

Can anyone on the list send me a mailing of that FAQ?

Thanks.....

Bob
NA4G

From ab4e1.com Mon May 30 23:19:14 1994
From: "Jack GF Hill - Sysop [HOME]" <root@jackatak.raider.net>
Subject: Boatanchors FAQ (L O N G ! ;^)

BoatAnchor Bob-

> Several months back there was a boatanchors FAQ posted here.
Your short term memory may be shot, but your L O N G Term is fine! The
posting of a FAQ was one year ago or so in the past...

> I saved a copy but alas nuked it recently.
I saw it glowing in the dark and retrieved it from the depths of the
archives... There may yet be more editions with corrections (let me know
and I'll go fishing again... ;^)

> Can anyone on the list send me a mailing of that FAQ?
Why not to the list, if for no other reason that to remember to thank
John for the effort that went into creating this:

-----8><-----
>From anarky.enet.dec.com!brewer Tue May 25 22:45:12 1993
Message-Id: <9305251958.AA27819@enet-gw.pa.dec.com>
Date: Tue, 25 May 93 12:58:21 PDT
>From: "five easy pieces, put 'em together" <brewer@anarky.enet.dec.com>
To: boatanchors@anarky.enet.dec.com
Apparently-To: boatanchors@gnu.ai.mit.edu
Subject: FAQ Draft.

"Boatanchors" FAQ
FAQ Maintainer: John Brewer
brewer@anarky.enet.dec.com

Index:

- * Why boatanchors?
- * What is a "Boatanchor"?
- * Where can I find one?
- * What type of boatanchor should I get?
- * Boatanchor Safety
- * Boatanchor restoration.
- * Where to get parts? ("are tubes hard to find")
- * Where can I find more information?
- * Where and how do hams operate boatanchor transmitters?
- * Typical boatanchors and prices.

?

Why boatanchors?

Some may question the desire for 80 pound receivers and 100 pound transmitters, both with filaments sitting there getting hot and wasting power in this day of microprocessor based, mega-memoried miniaturized transceivers! Although modern radios are extremely good at what they are designed to do, they are about as interesting to operate as a toaster oven. They have no soul.

Additionally, many find a zen-like feeling in taking an old, misused ratty old radio and carefully restoring it back to health. Like cars of the era, boatanchor radios were made to be worked on, modified, and tinkered with. Many think of it as Real Radio in this era where fixing a transceiver is accomplished by boxing it up to send to the manufacturer for a custom VLSI chip replacement. Indeed, a warm soldering iron is almost a requirement for operating a vintage station.

Others claim that boatanchors SOUND better than their silicon descendents, and this is generally true. The audio from a Hammurlund or National receiver, or a Johnson transmitter can sound much better than the 300mW audio coming out of the 2" speaker in the typical transceiver.

Watching the flicker of 807 modulators in a Viking I

as you speak into a D104 mic, is certainly more stirring on a winter night than considering hole and electron flow.

If truth be known, much, if not all of the above although true, are merely justification for the insatiable hunt for more and more of these old boxes, simply because they are just too NEAT to have and operate!

What is a boatanchor radio?

Although there are different interpretations of this term, generally any radio that is "hollow state" or tube-type is considered a boatanchor. Units produced from WWII until the mid 60's are probably the most popular examples of the genre. The origin of the term "boatanchor" becomes self-evident after carrying a DX100 (a classic anchor) to your car and noticing how much longer your arms have become.

Boatanchors may be transmitters or receivers... and no 'anchor station is complete without an assortment of like-aged station accessories like microphones, Transmit/Receive relays, vintage SWR bridges and so on. All of these items are valid subject matter for the boatanchor mailing list.

Where can I find a boatanchor radio?

The best way to find a boatanchor is to let other hams in your area know you are interested in them. Often times I have been given a boatanchor, because the former owner has relegated it to the garage or basement. This is also the cheapest method. When attending a hamfest, ask some of the sellers if they have any for sale. Often times sellers won't bring such stuff, as it is HEAVY and is perceived as not being sellable. Look under the tables, and in the back of the sellers displays for them! While you are under the tables rummage thru the boxes of parts found under there for parts that will come in handy restoring your new-old treasure. Tubes, high voltage caps, vintage microphones and connectors may be found lurking here!

If you are in a hurry (and have money) ads in Electric

Radio magazine (see bibliography), the Ham Trader Yellow Sheets, or your local packet BBS are good places to look. Expect to pay more through these outlets. Also expect to become an expert in UPS shipping rules. Boatanchors are heavy, and often the cost of shipping one can exceed the cost of the entire unit.

What type of Boatanchor should I get?

This is a question that has as many answers as there are individuals. Generally, as a "starter" boatanchor, 50's vintage gear is probably the best way to go. Radios in this era are quite desirable, but often times won't require extensive surgery to get repaired and on the air. A radio from a well-known manufacturer is also a good choice... for receivers, look for Collins, Hammurlund, Hallicrafters, and National are all good radios. In the transmitter space, Collins, E.F. Johnson, and Heathkit (with certain reservations) will do well.

Transmitters with plate modulated AM are the more desirable units. Prices will generally reflect this.

Good "starter" transmitters include, but are not limited to:

Johnson: Ranger I or II/Viking I or II/ Valiant/500

Collins: Any 32V series.

Heath: Apache, DX100A or B
(my AM bias is showing!)

"starter" receivers include:

National 183/183D, HR060 and MANY others

Hallicrafters: Many SX series.

Hammurlund: HQ129, HQ150/160/170/180, Super Pro series, many others.

Collins: any 75A series.

By "starter" radio, I do not mean to indicate the cheapest! Most of these radios would also be on the "best" list. I selected these as they are some of the best, and when one is starting anything, it is good to get the BEST stuff available, rather than getting junk and getting discouraged with it. There will be enough to learn (or remember!) without having to compensate for marginal equipment (was that 'Peak the plate and dip the grid, or the other way around??')! Any radio from this list will do the job for some time, and make operating a pleasure.

Boatanchor Safety

This is a genuine concern! Boatanchor have Real Voltage present in them! Lethal voltages. You will find that capacitors really DO store charge! None of this wimpy 12 volt stuff!

Get back in the habit of discharging any capacitors that are lurking under the hood. Keep one hand in your pocket when working on a hot radio. Be REAL careful and THINK THINK THINK before twiddling with a boatanchor that must be powered up and worked on.

It is SO easy to get used to working on solid state equipment and not worrying about Real Voltages... don't do this!

Also, many older radios are not fused... receivers are good examples of these. I generally replace the line cord (they usually need it anyway) and either put an in-line fuseholder, or some of the Heath-type fused plugs in the radio. Fires are nice to have burning on winter evenings but not when they are on top of your operating desk.

Speaking of operating desks, you will become good at carpentry if you spend much time as a boatanchor operator. You will quickly discover that the table you used to operate your tranceiver is way too small, and waaayyyy too wimpy to support a growing boatanchor station!

Boatanchor Restoration

This subject could easily fill many pages. Below are just some common topics. The Mailing List is a good place to ask about other issues. Remember the radio that stares at you from your bench is old. There are not many around. Take that into consideration as you proceed through the process. If you erase the dial marking on your receiver by cleaning it with Windex, you likely will not find another at Radio Shack. Take your time and enjoy. The journey to a working boatanchor, like life, is the _point_ not a process. You will say less nasty words if you take your time.

[does someone have Jim lockwoods memo about bathing radios?]

[I'll add my \$.02 about NOT bathing radios!]

Some general restoration tips:

- * Power up old radios gently. Plugging it into the wall and turning it on is not gentle! Bringing it up slowly to operating voltage with a Variac so that electrolytics can "form" is gentle.
- * Check fuses before powerup. Many 'anchors will have the wrong value fuse in it. Checking the fuse before purchase is a good thing to do too. If it's open, you at least know what you are getting into.
- * Don't trust that the tubes that are in the sockets are the correct tubes. Check them against the schematic. If you don't have a manual (and even if you do) note which socket the tube came from so that you can replace them correctly.
- * Don't clean tubes with water. The marking on the glass will likely come off with one good swipe of a water dampened cloth.
- * Assume many electrolytic and paper caps are bad. Check them.
- * Check high resistance, and high wattage resistors for correct value.
- * Nifty tools to have are flux brushes, for cleaning nooks and crannys. Windex is nice for cleaning chassis. Qtips are good to have too.
- * NEVER clean dial markers or drums. If you do, assume that they will wipe away never to be seen again. You WILL say bad words if this happens!
- * WD40 or Scotts Liquid Gold (my favorite) applied to a clean wrinkle finish will do a great job of restoring the lustre. Works well for knobs too!
- * Never use WD40 or Scotts Liquid Gold on anything until you have tried it on a non-visible part of the cabinet to make sure it won't dissolve anything.

[----- help me out here... need more 1 liners and general tips-----]

Where do I get parts? (or "aren't tubes hard to find?")

You will need parts to keep or get a boatanchor on the air. Remember that even 50's vintage radios are 40 years old.

Fortunately, hams are notorious packrats and parts suprisingly abound, for old gear, particularly at hamfests (and in the boxes under the table as mentioned earlier). Word of mouth once again will work wonders at getting tubes, high voltage caps, and the like shoved in your direction. Beware that this is an addiction, and boatanchor radios, parts, and periodicals will soon overrun all available space. Trust me.

If you are in a hurry, or need to get a radio working before your hoard of tubes and parts gets established the list below, taken originally from the ARRL server may be of help.

>-----<
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This ARRL Technical Information Service handout has been derived from the June 1992 QST "Lab Notes" column. Information has been added to keep it current. You should also periodically check the ham-classified section of ham and electronic publications.

How To Locate Manuals and Documentation

"Excellent rig. Needs a little work." How many times have you

passed up a good deal because you were certain you'd never find the service information? How often have you sent your rig to the factory for a bug that you could have fixed if you had the documentation? Mike Gruber, WA1SVF, one of our ARRL Laboratory Engineers, has searched high and low to find sources for service manuals and other useful information. In this month's column he gives you his results.--WB8IMY

Q: Why do I need documentation for my radio equipment?

A: Unless you're an electronics genius, proper documentation is often essential to the repair or restoration of any radio equipment. Even a simple schematic can save hours of time that would be wasted otherwise.

Q: Okay, but is documentation readily available--even for my antique receiver?

A: Believe it or not, there is a good chance that documentation still exists for almost any radio you're likely to encounter. Your success in finding it, however, depends on knowing what type of documentation might be available for your particular piece of equipment.

Q: What types of documentation should I be looking for? Where can I find them?

A: Let's save the names and addresses for later and begin by taking a look at the different types of equipment documentation available. There are several:

Owner's Manuals: An owner's manual is supplied with the unit at the time of purchase. It's intended primarily as an instruction manual for the owner. It may not contain a schematic and service data is usually minimal. Although it's better than nothing, an owner's manual leaves quite a bit to be desired should a repair or alignment be required.

Manufacturer's Service Manuals: Service manuals are usually sold by the manufacturer. They contain vital repair, service and alignment data. Most manufacturers supply service manuals for their products, although some may not provide manuals for obsolete equipment. If you're working with old equipment, it's possible that the manufacturer may have gone out of business. Keep this in mind the next time you purchase a new rig. Obtaining a service manual will take a little extra effort, but you'll be making a worthwhile investment in the future of your equipment.

Third-Party Service Documentation: This type of documentation is published by companies other than the manufacturer. It's available in several varieties from basic schematics to complete service manuals. While modern Amateur Radio gear is usually excluded, third-party documentation offers a wealth of information on antique receivers and modern consumer electronics.

Q: Wait a minute. You mean that there are companies that publish and sell service data for another company's products?

A: Certainly! Some of the most noteworthy publishers--past and present--include:

Howard W. Sams & Company Photofacts: Sams started publishing Photofacts in 1946 with only 12 employees. Today Photofacts are accepted as the standard for accuracy. Complete chassis photographs are included and each component is clearly labeled.

Alignment procedures and normal voltage readings are always provided. The extensive Photofacts library does not include modern amateur equipment, but you'll find service data for some of the classic shortwave receivers made by companies such as Hammurlund and Hallicrafters.

Photofacts are sold in numbered folders and volumes. To obtain the correct Photofact, you must find the reference number for your particular piece of equipment in the Photofact Index.

There is an interesting sidenote to the Photofacts story. Sams creates Photofacts from actual product samples. Instead of using the manufacturer's schematics, the circuits are analyzed and traced by Sams technicians!

John F. Rider Perpetual Troubleshooters Manuals: "Rider's," as this series is commonly known, was first published in 1930 and covered radios back to 1926. The first numbered volume, however, appeared in 1933. New volumes were published at a rate of about one per year until the last one, volume 23, appeared in 1953. (Rider's for TVs, however, went from 1948 to 1957, volumes 1 through 18.)

Rider's is indexed by a system that is very similar to the Photofacts. Several index volumes were published, such as volumes 1 to 7, 1 to 10, 1 to 15, 16 to 22 and 23 only. Unlike Photofacts, however, Rider used service data provided by the manufacturers.

RCA Victor Service Data Books, commonly called "Redbooks." These cover RCA receivers manufactured from 1923 to 1950. The first

volume covered receivers from 1923 to 1928. A new volume was published each year until 1950.

Supreme Manuals: Compiled by M. N. Beitman, these first appeared about 1930 and covered radios made as early as 1926. One volume per year was published until the company went out of business in the 1950s. These generally contain only schematics; Riders and Photofacts are far more complete.

Hugo Gernsback's Official Radio Service Manuals: Six volumes were published from 1929 to 1936.

Mallory Radio Service Encyclopedia: First published in the early '30s, the Mallory Encyclopedias contained a very complete listing of radios by manufacturer and model number. In addition, an exact tube complement was given for each product. This information can be very useful if you are seeking service data for an old radio with an unknown model number.

Q: Speaking of tubes, what about vacuum tube data? Is that kind of information still available?

A: It sure is! Data for Eimac tubes, frequently found in amateur amplifiers and other high-power RF applications, is currently available from the manufacturer. Transmitting tube data can also be found in the ARRL Handbook; look for it in Chapter 35 if you have a recent edition. Data books for other tube types, such as receiving tubes, have been published by several companies. Most of these data books are no longer in print. Copies, reprints and even old originals can still be obtained if you know where to look. Two of the most popular data books for tubes are:

RCA Tube Manuals: These are probably the most common tube manuals -- especially for receiving tubes. Separate manuals were also published for transmitting, special purpose and industrial tubes. These manuals first appeared in the 1930s and were frequently updated.

General Electric Essential Characteristics Tube Data Books: These are similar to the RCA Manuals.

Tube substitution guides have also been published by Sams and John F. Rider.

Q: Now that I know what I'm looking for, where can I find the documentation?

A: If you prefer the manufacturer's service manual, start by

contacting the manufacturer directly. If the manufacturer is out of business, or no longer supplies the manual you need, you have other options. For example, try obtaining a copy from a manual-supply company.

If you're working with military gear, manual-supply companies are also good sources. And, some military equipment manuals can still be obtained from the government. (More about that later.)

If you think a Photofact or Rider might be available based on the age and type of equipment involved, check with your local library. Many city and university libraries have them and will let you make photocopies provided that no copyright laws are violated.

If your local library can't help you, try one of the "schematic services" that cater to antique radio buffs. Their prices are generally quite reasonable. Don't forget to check the hamfest flea markets and yard sales. Service information can turn up in the most unusual places!

For a difficult case, you might try a classified ad in QST. A classified ad in a publication that specializes in the type of equipment involved (such as Electric Radio Magazine\1/ or Antique Radio Classified\2/ for surplus or antique rigs) may be very effective.

ADDRESSES

Q: Come to think of it, I have several radios that could be put to good use--if they were working! How about those addresses you promised?

A: Here they are. Good luck with your projects!

Alinco Electronics, Inc
438 Amapola Ave
Suite 130
Torrance, CA 90501
tel 310-618-8616
Supplies Alinco manuals only.

Amateur Wholesale Electronics
PO Box 224
1040 Industrial Dr
Watkinsville, GA 30677
tel 404-769-8706 (technical service and orders)

Manuals and replacement parts for Azden Radios.

Antique Audio
41560 Schoolcraft
Plymouth, MI 48170

Older factory manuals for RCA, Zenith (including Transoceanics) and several others. Riders volumes 1 through 22, Sams Photofacts 1 through 600, Beitman's volumes 1 through 10 and Sams Transistor Service Manuals volumes 1 through 90. The price is \$5 per schematic up to 8 pages. Fifty cents for each additional page. Written inquiries for schematics preferred.

Antique Electronic Supply
6221 South Maple Ave
Tempe, AZ 85283
tel 602-820-5411

Antique Electronic Supply supplies pre-1960 service manuals for many electronic products, including communications receivers. The cost is \$4.50 each. A catalog of antique radio parts and books is also available. They offer reprints of some older service manuals, tube manuals, a tube substitution guidebook and even a ballast tube manual. [LOTS of tubes!! /john]

Ardco Electronics
PO Box 95
Berwyn, IL 60402

Manuals for 95% of the Hallicrafters product line. The company was founded by Anthony Dambrauskas, the Hallicrafters service manager, when Hallicrafters went out of business in 1978. Today, the business is being carried on by his son Robert. Manuals range in price from \$7 to \$20.

Brock Publications
PO Box 5004
Oceanside, CA 92052

Manuals for for all amateur equipment sold by Swan Electronics. Also stocks manuals for Cubic Communications, Astro and Siltronix products. Brock Publications is a home business owned by Grace Brock who retired from Swan Electronics/ Cubic Communications in

1990.

Cardwell Condenser Corporation
80 East Montauk Highway
Lindenhurst, NY 11757
tel 516-957-7200
FAX 516-957-7203

Manuals for Hammarlund equipment. In addition, they also have a limited supply of components for Hammarlund receivers and transmitters. They also manufacture roller inductors and variable capacitors.

Center For Legislative Archives
National Archives
Washington, DC 20408
tel 202-501-5350

(Record Group 287) US Army Technical Manuals for radio equipment manufactured from 1940 to 1979. Photocopies can be obtained at a cost of 25 cents per page and a \$6 minimum order. A "Reproduction Service Order" must first be completed by the National Archives to determine the cost of the specific manual you desire. The manual on this form must be identified by its proper Army Technical Manual number. If this number is not known, contact your nearest US Government Depository Library for assistance. (These are usually the main public libraries in large and medium-sized cities.) A booklet entitled Indexes and Lists to Army Technical and Administrative Publications 1940-1979; The National Archives Microfilm Publications Pamphlet Describing M1641, also available from the Archives, describes this procedure.

Dean K Kidd, W7TYR
27270 SW Ladd Hill Rd
Sherwood, OR 97140
tel 503-625-7363

Manuals and data for older Tektronix test equipment.

Eico Electronics Instrument Co, Inc
363 Merrick Rd
Lynbrook, NY 11563
tel 516-599-5744

Eico manuals for the last 25 years. Calls are accepted on Monday, Wednesday and Thursday from 8:30 AM to 2:30 PM Eastern time.

Fair Radio Sales Co, Inc
1016 East Eureka
PO Box 1105
Lima, OH 45802
tel 419-223-2196

Manuals for surplus equipment. Also some Tektronix manuals and vacuum tube data. Catalog available.

Hi-Manuals
PO Box 802
Council Bluffs, IA 51502

Extensive collection of manuals from the mid-30s to the 70s. Amateur Radio equipment is included. You must order from a current catalog and "dropped list." The cost is \$3 for both. Many Heathkit manuals in stock. They also supply vacuum tube data from the RCA Receiving and Air Cooled Transmitting Tube manuals and the Rider #35 Tube Substitution Guide. The cost is \$5 per tube plus a business-size SASE. Your check will be returned if the tube data is not available. Hi-Manuals cannot accommodate technical correspondence, quote requests or telephone calls.

Howard W. Sams & Co
2647 Waterfront Parkway East Dr
Indianapolis, IN 46214-2041
tel 800-428-7267
tel 800-428-5331

You can order Sams Photofacts through your local distributor (saves postage and handling costs), by mail or by phone. Sams covers most consumer electronic items manufactured since 1945. A photocopy service for manufacturer's manuals and Rider's data is also available.

ICOM America, Inc
2380 116th Ave NE
PO Box C-90029
Bellevue, WA 98009-9029
tel 206-454-7619

Manuals and parts for ICOM products. Call for prices. Most service manuals cost around \$25 for base and mobile units; \$20 for hand-

held units.

Kenwood (East Coast)
East Coast Transistor Parts, Inc
2 Marlborough Rd
W Hempstead, NY 11552
tel 800-637-0388 (orders only)

Kenwood (West Coast)
Pacific Coast Parts Distributors, Inc
15024 Staff Ct
Gardena, CA 90248
tel 800-421-5080 (Outside CA)
800-262-1312 (CA only)

Kenwood product manuals only

Japan Radio Company

Service manuals are available from JRC dealers. The three companies likely to have JRC manuals in stock are:

Electronic Equipment Bank
323 Mill Street NE
Vienna, VA 22180
tel 800-368-3270

Gilfer Shortwave
52 Park Ave
Park Ridge, NJ 07656
tel 800-445-3371

Universal Shortwave
6830 Americana Parkway
Reynoldsburg, OH 43068
tel 800-431-3939

Jim Farago
4017 42 Ave South
Minneapolis, MN 55406-3528

A complete set of Riders, Volumes 1 through 23, covering radios from 1924 to 1954. The cost is \$3 per copy plus SASE. The customer must provide the unit name, brand name and model number.

Land Air Communications
95-15 108th Street
Richmond Hill, NY 11419
tel 718-847-3090

Authorized dealer for Kenwood, ICOM and Yaesu manuals. Also carries Collins, Johnson, Hallicrafters, National and other manuals. Can provide schematics on most equipment dating back to 1945.

Musty Manuals
HamHeaven Communication Corp
645 Wheeling Rd
Wheeling, IL 60090
tel 708-634-6467

An extensive collection of owners manuals, service and maintenance manuals, catalogs, magazines and other technical facts on all types of early and late model radio equipment--including ham gear. Manuals come with updates or articles, product reviews and other tidbits of information. Catalog available.

MECCA
1132 Conway Dr
Newark, OH 43055
tel 614-522-4944

Used manuals for test equipment, amateur equipment and early receivers. Prices range from \$5 to \$35. Send an SASE with your request for price and availability.

Olde Tyme Radio Company
Suite 317
2445 Lyttons ville Road
Silver Spring, MD 20910
tel 301-585-8776
Some RCA Tube Manuals and Riders for sale. Catalog available.

Puett Electronics
PO Box 28572
Dallas, TX 75228
tel 214-321-0927 or 214-327-8721

Schematic diagrams "for nearly any radio receiver." Cost is \$5 with manufacturer and model number; \$15 plus drawing and description if the manufacturer or model number is unknown. Reproduction manuals, Rider's indexes, RCA Vacuum Tube Manuals, and many other service/instruction manuals for classic radios and related equipment are available. Some amateur equipment manuals including Collins. Test equipment manuals include Hewlett Packard, Tektronix, Hickock and others. Also supplies recordings of old radio shows as well as tubes and other antique radio components. Catalog available.

Radio/TV/Ham Schematics
Alton H. Bowman
4172 East Ave, RD 2
Canandaigua, NY 14424

A large collection of manuals and schematics for Amateur Radio equipment and other electronic products from 1920 to 1970--many unusual. Welcomes requests for odd-ball material with and without model numbers or labels. Prices are \$5 for schematics and \$7.50 to \$10 for manuals. An SASE is appreciated. Alton emphasizes that this service is his hobby and not a business.

R. L. Drake Company
230 Industrial Drive
Franklin, OH 45005
tel 513-746-6990
Drake product manuals only.

Robot Research Inc
5636 Ruffin Rd
San Diego, CA 92123
tel 619-279-9430
Robot manuals only.

Slep Electronics Co
PO Box 100
Otto, NC 28763-0100
tel 704-524-7519

Operation and service manuals; schematic service for old and new amateur radios, commercial and military surplus test equipment, commercial and surplus military radios, antique radios and equipment manuals. Catalog not available due to large stock. Send

an SASE for price and availability. Include make and model of each unit.

Sony Publications
PO Box 20407
Kansas City, MO 64195
tel 816-891-7550, extension 33 (Customer Service)
Manuals for Sony shortwave receivers and other products.

Steinmetz Electronics
7519 Maplewood Ave
Hammond, IN 46324
tel 219-931-9316

Schematic copies from a complete set of Rider's and Beitman books, some older manufacturer's manuals (consumer radios only) and Sams Photofacts. The cost is \$3 for the first schematic copy, \$2.50 for the second and \$1.50 for each additional copy. Include an extra dollar for research if the model number is unknown (SASE preferred). Also carries vacuum tubes and other parts. Catalog available.

Surplus Sales of Nebraska
1502 Jones St
Omaha, NE 68102
tel 402-346-4750

Stocks a complete line of manuals for Collins amateur equipment and partial collection of commercial equipment. Call or send an SASE for price and availability. Collins parts are also available.

Ten-Tec, Inc
PO Box 8010
Sevierville, TN 37864
tel 800-833-7373

Manuals for Ten-Tec products only. Most older manuals are available and they will make photocopies. Call or write for specifics.

US Army Military History Institute
Carlisle Barracks, PA 17013-5008
tel 717-245-3611

Technical manuals for military radio radio equipment. If possible, include the manual number with your request. If this is unknown, include a complete description of the equipment including the model name, model numbers and the time period in which the equipment was in use, if known. Once a specific manual is identified, it may be obtained in one of two ways. If the Institute possess three or me copies, one may be borrowed through interlibrary loan procedures. This process must be initiated at the your local library. Alternately, photocopies can be purchased. The minimum cost is \$6 for up to ten pages. Each additional page is 25 cents. Each patron is allowed up to 300 pages per calendar year. Selected bibliographies of Institute holdings are available through interlibrary loan.

Varian Associates, Inc
301 Industrial Way
San Carlos, CA 94070-2682
tel 800-432-4422

EIMAC tube data for tubes from 1-kW to 1.5-kW plate dissipation including all glass-envelope tubes. 200-watt, 800-watt and larger tubes are manufactured in Salt Lake City, Utah. You can use the telephone number shown above to access either plant for data on any EIMAC tube.

VISTA Technology Inc
3041 Rising Springs Ct
Bellbrook OH 45305
tel 513-426-6700

Newly published manuals for selected models of Rockwell/Collins Amateur Radio equipment. Authorized by Rockwell International.

Western Nebraska Electronics
HC-84, Box 1
Potter, NE 69156
tel 308-879-4552

A complete collection of Collins manuals. The cost is \$12.50 for a reprint copy, or \$35 for a printed copy. Also carries a large supply of Collins parts.

Yaesu USA

17210 Edwards Rd
Cerritos, CA 90701
tel 310-404-2700

Owners and service manuals for Yaesu products. Also sells components.

---Notes: \1/Published monthly by Barry Wiseman, N6CSW, 4 Aspen Pl, Durango, CO 81301.

\2/Published monthly by John Terrey, 498 Cross St, PO Box 2, Carlisle, MA 01741, tel 508-371-0512.

* Where can I find more information?

Well, a good place to start is the boatanchors mailing list! There are quite a few people with quite a few radios here, and questions are always welcome. Ask away!

Alternate sources of information:

* Electric Radio magazine.
Highly recommended! _The_ periodical for boatanchor operations. Whether you are a ham or SWL, or restorer, there is something in here for you. The classifieds alone are worth the price of admission. Very professionally produced. Monthly.

Electric Radio Magazine
POB 57
Hesperus, CO.

* Antique Wireless Association.
Although a mixture of general old radio lore, and communications gear, there is enough good stuff in here to justify the price of \$10 a year. Very nicely produced and published! Quarterly.

[Address]

* AM Press Exchange

The "original" AM and boatanchor publication. Has been rather slim in content of late, but interesting to get if you already get E. Radio. Irregularly.

Don Chester-K4KYV
[address/cost?]

Where Do Hams Operate Boatanchors?

On CW you are likely to hear boatanchors lurking anywhere. There are probably more CW boatanchors in operation than anything else.

On AM the following frequencies frequently have AM activity, band conditions and seasonal variations withstanding:

3870-3890 Khz
7290-7300 Khz
14.286 Mhz
21.4-21.45 Mhz
29.0-29.2 Mhz

What are Typical Boatanchors and Prices?

This is a difficult one, as prices can vary from free to many hundreds of dollars. What follows is a list of popular radios and prices one would expect to see in the Electric Radio classifieds.

Transmitters:	Collins 32V Series (32V1,2 and 3)	\$175-\$400
	EF Johnson Ranger	\$90-\$175
	Viking I	\$75-\$150
	Viking II	\$60-\$150
	Valiant I,II	\$150-\$300
	Viking 500	\$400-\$700
	Heath DX100	\$40-\$150 *
	Apache	\$50-\$150 *

* - Kits. Price should vary widely depending on how it was assembled.

Receivers:	Collins 75A Series (75A1, 2,3 and 4)	\$125-\$600
	National HR060	\$175-\$350

National NC183D \$100-\$175

Hallicrafters

[someone help me here with a few models/prices?]

Hammurlund HQ129	\$60-\$150
HQ150	\$75-\$150
HQ160	\$90-\$175
HQ170	\$100-\$175
HQ180	\$150-\$250

Epilog

Dont look as boatanchors as an investment. Get a real grimy specimen and clean and fix, and coax it back to life. Turn in on with the rest of the room lights turned off. As it warms up look into the insides and see the orange glow from the filaments and the purple fire from the 866's. Watch the giant S-meter come to life, and the dials emit that soft light, framed by your carefully cleaned and waxed cabinet. Rotate the knobs that are of sufficient size and layout to permit easy, flywheel smooth adjustment.

Maybe tune to the BBC on your NC183.... watch the S-meter climb as the full audio comes out from the 6 watt output stage as you crank back the RF gain. Fiddle with a few more knobs (boatanchor operation does not need to be a passive experience) to get it set just the way you want it.

Then you'll know why boatanchors are such pleasant things to own. Like mine, your transceiver may become a very expensive frequency counter and RF generator used to align the 'Real Radios'.

-----8><-----

> Thanks.....

Don't mention it... Hope this was what you wanted...

73,

Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

Jack GF Hill |Voice: (615) 459-2636| Ham Call: W4PPT
P. O. Box 1685 |Modem: (615) 377-5980| Bicycling and SCUBA Diving
Brentwood, TN 37024|Fax: (615) 459-0038| Life Member - ARRL
root@jackatak.raider.net - "Plus ça change, plus c'est la même chose"

From ab4e1.com Thu Jun 2 09:43:38 1994
From: "Roy Morgan" <morgan@speckle.ncsl.nist.gov>
Subject: Collins Filter: Info needed

Anchorites:

At the recent Hamfest I got one new-in-the-box:

Collins Mechanical Filter
F455 Y31 6429
526 9338 00

The filter is cylindrical. I would guess 3.1 kc bandwidth, and that the last line is a federal stock number.

Any other info would be appreciated.

Thanks.

Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899
301-975-3254 Fax: 301-948-6213 Internet: morgan@speckle.ncsl.nist.gov

From ab4e1.com Wed Jun 1 00:16:38 1994
From: "Terry O'Laughlin" <OLAUGHLIN@vilas.uwex.edu>
Subject: Re: CV-157

> -- TMC SSB converter -- this is the small unit made to match
> the GPR-90, with a small dial at the center. Tabletop unit, not
> the CV-157 behemoth!

> Behemoth? The thing is only an accessory to R-390 - type receivers. Don't
> let its weight (100 lbs) and its complexity (44 tubes) fool you.. :-)
>
> Now, that's a real boat anchor. It goes well with the 390, though.

Hey! Don't knock it until you've tried it. The CV-157 is great fun.
Try hooking a stereo headphone to the terminal strip on the rear so
that the LSB channel is on the left and the USB on the right.
Visualize tuning the spectrum with 3D glasses on! Propagation
effects are really accentuated so hold onto your stomach.

73s Terry O' WB9GVB

From ab4e1.com Wed Jun 1 05:08:07 1994
From: "PMD G.SIFAKIS" <pmdsif@isoft.intranet.gr>

Subject: Re: CV-157

Hey! Don't knock it until you've tried it. The CV-157 is great fun.
73s Terry O' WB9GVB

Terry, I didn't mean to knock the CV-157, just to make a little fun of it. I have one mounted right below the R-390A and it's great fun to use, look at (when it tries to keep on frequency mechanically), but not to repair. I'll try the trick with the stereo headphones. And I still think it is a behemoth.

George, SV0KA

From ab4el.com Wed Jun 1 13:07:39 1994
From: rdkeys@csemail (R. D. Keys)
Subject: CWIST Friday Night Fist Function

OK folks, a reminder to try the CWIST sked this friday night at 0400UTC on 3702.5khz and 7102.5khz. Last week, I was studying for commercial exams --- this week all is unhassled..... whew! (:+}}

Also, when done CWISTing for the evening, try listening in for TM6JUN on CW about 3554/7030khz. This will be the Special Event Station for the Normandy Invasion 50th anniversary celebration on Utah Beach. The boys in France have been coming in quite well on 80 and 40 meter CW for the past few days, so it should be easy to hear them. My guess is that they will be on and rolling starting about 0600 or so, maybe earlier.

73 TU SU SK DE NA4G
Bob

QST QST QST CQ CQ CQ DE NA4G NA4G NA4G BT
011625UTC JUN 1994
FM NA4G
TO ALL CW OPS WORLDWIDE BT
CWIST FRIDAY NIGHT FIST FUNCTION.
ALL OPS INVITED TO QSW/QSX 3702.5/7102.5KHZ 0400UTC 04/JUN/94.
GET ON THE AIR AND ENJOY A PLAIN CW EVENING ON THE 40/80 METER BANDS.
USE A REAL HAND KEY (A STRAIGHT SENDING IRON OR BUG IS ENCOURAGED).
CALL CWIST IMI DE YOURCALL K.
ENJOY OLD-TIME AMATEUR RADIO AND TRY SOME FRIENDLY BRASS POUNDING.
EXCHANGE MORE THAN RST QTH NAME HELLO AND GOODBYE.

HELP ALONG THE NEW HAMS ON CW TO GET THEIR SPEED UP.
TELL A FAIR YARN OR TWO AMONG FELLOW CWISTS AND RAGCHEW A WHILE.
TELL SOME HISTORY ABOUT THE OLD-TIME DAYS AND YOUR EXPERIENCES IN RADIO.
IF YOU ARE AN OLD TIMER PLEASE JOIN IN AND SHARE YOUR EXPERIENCES.
IF YOU WERE EVER A PROFESSIONAL PLEASE JOIN IN AND SHARE YOUR EXPERIENCES.
USE BOATANCHOR GEAR IF YOU HAVE IT AVAILABLE OR WHATEVER YOU HAVE.
SEE YOU THERE OM/YL.
73 TU SU DE NA4G BOB AR

* May you have fair winds and following seas on your watch at the key. *

From ab4el.com Tue May 31 20:51:39 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: Deerfield (Rochester) NH fest

I went to the Rochester NH hamfest on Friday and Saturday (5/6, 5/7) and enjoyed myself. Friday, the gates opened for buyers at 3 p.m. instead of Noon like it was last year. (You could get in "early" at 9 a.m. for \$20!!!) I was there Saturday around 9:15.

My interest lies mainly with the tube rigs, as you know... Here are my impressions:

There was a LOT of Hallicrafters stuff there! Most of it was trashy looking. I think the main reason I don't go for Hallicrafters much is they seemed to go for the low-end market, and much of the gear looks that way. There were some nice exceptions: SX-101s, HT-32s, HT-37s... I saw a few 30s rigs like the Skyrider, and at least two SX-28s.

National was there. I saw some NC-300 and 303 ham rigs, and I saw the 6, 2, 1.25 meter converter for the NC-300 for the first time. It's the same size as the speaker! (I thought it mounted inside the cabinet!) I saw one NC-98 and was glad I got mine last year for \$35. There was an HRO-50T on the ground, but I didn't see any extra coils so I didn't price it. I also saw an NC-188, which is a general coverage set looking like the 300. I never saw so many NCX-3s! There must have been six of them there, most with the external VFO. I saw one NCX-5.

Several dingy looking Swans were there. Most looked like they

ran mobile all their lives... I did see one 500 which looked well cared for.

Hammarlund: lots of older Super Pros. I saw a few HQ-170s, an HQ-145, and one fellow had two HX-50 transmitters. I even saw a rare HQ-105TR -- that's the general coverage set with one CB or 10m crystal transmitter capability. It looked awful...otherwise I might have been interested just because it's a curiosity.

Drake was there, mostly on Saturday. I saw several TR-4s at average prices. One fellow wanted \$275 for an R-4A (right.) and I also saw a T-4XB and a couple of C-lines. No 7-line stuff except for an L-7 amp, and no 6 meter gear at all. (Last year I saw a very nice TR-6 with the RV-6 VFO.) I saw two TR-3s as well. Overall, the Drake stuff seems to be well cared for considering its age. I saw a 2-A and a 2-B receiver as well, in fair shape. Almost bought a TR-22 2-meter rig but I didn't really want to spend \$40..... <cheapskate!>

Collins was there. I saw two R-390As, unpriced, and one had the Technical Materiel Corporation SSB converter as well. I should have priced the TMC unit...oh well! One idiot had a 75A-4 marked at \$800... Another fellow had a 32S-1 transmitter, with power supply, at \$275 (better deal!). I saw a complete S-line but didn't get near enough to see a price. A KWM-2A in nice looking shape was \$550.

There were a few interesting Johnson items. A friend had a Ranger I for sale for \$150... I saw a Challenger, a 6N2 transverter, and another idiot had an average Ranger II for \$390 asking price. (He said he really didn't want to sell it, so he priced it high.... THEN WHY TAKE IT OUT OF THE DARN CAR?!) A friend got a Viking II with VFO for \$125 which I think was one of the better Vintage deals there. We'll have fun going through it and checking it out...

There were several Gonset Communicators there -- several models. I don't do 6 or 2 yet... I saw a Globe Sidebender (poor shape but I think it's a rare one). Saw two Harvey-Wells Bandmasters. Many Heath stations -- from SB-101s to the digital ones. Several dingy, and more that looked well preserved. Some also came with several accessory units, like the phone patch or the monitor scope. And there were the obligatory Benton Harbor Lunchboxes!

So there you have my impressions. Someone who spent both full days there might have seen better stuff. What did I buy? Mostly odds and ends. I got a bunch of crystals to try grinding. One I bought just for the curiosity factor (\$0.50) -- a Bliley round holder with the dial on the front for "rubbering" the frequency! Also a Heath signal tracer, a couple of tubes I needed, and some troubleshooting (tube) books.

What bugs me is the number of battered or dusty or rusty radios I see with HIGH PRICES on them! Shlep drags the S-38 up from the basement (had to take several layers of junk and old newspapers off it), losing a knob in the process, but what the heck -- and sticks a \$45 price tag on it. It seems that you have to look at radios priced \$100 or more just to get one that will work when you get it home. Most of these things looked like they'd made the trip to Rochester (was at Deerfield NH) several times! Why not put a \$10 price tag on it, give someone a challenge to fix, and get rid of it for that?

-- (crochety) Andy

... My vote for prettiest S-meter: National. Red 'n' yellow! (GPR-90 too.)

From ab4el.com Tue May 31 20:52:24 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: Drake 2-LF wanted

ul> From: Richard E Robinson <ulowell!uncc.edu!rerobins>

Gad, I've had more pleasant replies in this conference than in a long time on Fido!

ul> If Kevin can remember the QST issue, we have bound volumes here at the
ul> University library from the '50s through the late '70s and all on
ul> microfilm. I'll be glad to copy a page for you.

Speaking of which, I see some place sells all of QST-- back to #1 -- on microfilm. Do you know about that? I think it is like \$450 which is probably cheaper than finding the paper collection of all that... Anyway, I was curious if it had ALL the pages included, including the ads...

ul> I haven't heard about the Drake book.

I figured my dad had another brain fart! <grin>

ul> I still own a 2B/2BQ combo
ul> which I picked up several years ago for \$70 at a hamfest. New caps in
ul> the power supply, and a good cleaning, and the 2B looks brand new. It
ul> had hardly a scratch on it.

That's what I use by the bed. I didn't like the 2-A/2-B style at first, but I've really warmed up to it. I think they should have kept the black/white combination, and I love those knobs. Dial cord tuning isn't as smooth as the R-4 gears, but I haven't noticed any backlash. Great filters, too.

ul> Last October, I wanted a new receiver, so I
ul> sprang for an R8. It is quite a piece of gear. If you're used to the
ul> Drake passband tuning in a 2B, and the notch filter in the 2BQ, then it
ul> is quite easy to use. I feel the folks who put them down, just plain
ul> don't know how to use them.

A friend of mine bought an R-8 from Grove a couple of years ago and has been very, very, happy with it for SW broadcast DXing. You know, rare 1 kW African broadcasters, AM mode? Anyway, I think the Drake is more prone to images than my Icom R-71A (which I've been using a LOT less than the Drakes lately!) but the R-8 is still nice. I'm pleased that Drake is doing well again -- they have an SW-8 portable too, at \$600 *ouch*. In case you didn't know, there's a Drake net every Saturday, 8 p.m., 3865 LSB. Great people and a lot of fun; wish I could join in.

ul> TenTec and Drake have got to be the 2 finest companies to deal with
ul> that I have found in any business field. I still have my 1980 model
ul> TenTec Argosy which I will NEVER sell.

Ah well....I've passed up a couple of the earlier TT CW rigs, heck I don't need ANOTHER radio... <grin> But I know they are fine. Drake and TT also have great SERVICE DEPARTMENTS and that's a great thing to have in the 90s. (Though I hear Drake is expensive.) I've thought about selling my modified R-71A just because the R-4A gives it a run for its money, and the fact that parts for the Icom will be tough to get in 2000; the Drake will probably still have parts around then. When do resistors and caps go out of style? <grin>

ul> My next project will be to find a good Drake B line.

Good choice! Still plenty of them around. Just plan to search for that darned skinny mic connector.... (grin!) I hear Universal Radio has 'em for \$2.50.

--Andy

... A real ham knows how to rubber a crystal!

From ab4el.com Wed Jun 1 20:34:25 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: Drake 2-LF wanted

ul> From: Kevin E. Schmidt <ulowell!ptolemy.la.asu.edu!w9cf>

ul> I just xeroxed the QST advertisement; it's in the November 1964 QST.
ul> I will mail it tomorrow (unless I forget).

Thanks a bunch, Kevin. I hope I can return the favor someday.
I'd still like to find the 2-LF itself, too!

To the guy who loved the Magic Eye tubes... I don't blame ya. My first SW radio (on loan) was an Air Castle table radio which my grandfather had. It covered SW up to about 8 MHz, and had cities marked on the airplane dial. It also had that lovely green eye tube... I marvelled at hearing the BBC World Service so clearly on it...at age 12. I graduated to a National NC-98 which didn't have an eye tube but it DID have that beautiful National red and yellow S-meter.

I still love the eye tubes. I have a Firestone Air Chief radio in storage awaiting cabinet restoration, and it has the eye tube, too. Oh, a couple other things with 'em:

Heath Condenser Checker, model C-3
Heath signal tracer, model T-4.

I could use manuals for those two, as well as a Heath scope, IO-102, and also an Eldico tube keyer model EE-3A. I'll pay copying and postage, of course. (Manual source references would be nice, in any case.)

--Andy

P.S. -- on the signal tracer, how do you use it? I know the thing injects signals into the radio, but what is read on the eye tube, and what is the switch for on the large mosquito probe?

... Heh... Mongo LIKE tube radios!

From ab4el.com Tue May 31 20:50:32 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: Drake oldies

CC> From: ulowell!thumper.bellcore.com!cotton (Chase Cotton)

CC> Yup, I got Don's "what a mess" unit" but not the VFO. I figured
CC> I'd learn more cleaning and fixing a Drake than some of the other
CC> no-name tube rigs I've picked up along the way. And the experience
CC> would be handy should I happen across a sick R-4[BC].

Definitely -- and please pass on what you do know to me (us). I have a transmitter, too -- but haven't gotten a cord nor a fuse holder cap for the AC-4 that I got from Don. I also have a very sick R-4B that I got rather "gypped" on, in a deal, but the other items in the deal made it worthwhile anyhow... <grin>

One of the local fellows who sets up at all the fleas with manuals, had a Drake 2-B receiver for sale. I paid just over \$100 for it -- but it was just about the only thing at that flea. Anyhow, I took it home, replaced the 6BE6 he said was bad (developed a short as it heated up), tested the other tubes, and it works fine now. I spent a whole afternoon cleaning it up and you'd hardly recognize it now. The front panel came out beautifully! I even cleaned the white dial backing and the meter. I was lucky in that this had the 2-AC calibrator installed.

I had a 2-BQ speaker/q-mult from a previous deal, and I installed that. Right now I'm just using it for the speaker, because the Q-mult develops a hum on the note (for CW) and I have to track that down. But the 2-B sounds great. I set it up by the bedside because I enjoy listening around to the AM crowd on 3885 or the swap nets. The selectivity in the 2-B of 3.6, 2.1, and 0.5 kHz is super for SSB and CW but a little tight for other than ham-band AM.

By the way, a black Sanford Sharpie marker does great at hiding small scratches in the black Drake cabinets. My intention is not to make my receivers look "collector quality" and untouchable, but rather to make them clean and up to original specs. A "shelf radio" is no fun to me! And it makes me feel good that I've given a few pieces of gear a good home. Free from abuse, damp basements, and nicotine! <GRIN!>

CC> The receiver is now good and clean and all the minor repairs have
CC> been completed. I can't really start serious debugging till I rig
CC> up a supply. I just can't bring myself to buy a \$120 AC-4 to check
CC> out a \$40 radio. I'll happen across one sooner or later. Worst
CC> case I'll eventually either pick up the needed transformers from
CC> "Fair" and jury-rig a test supply with a variac. Wouldn't be able
CC> to operate that way, but I'd at least know if the rig was ok.

I'm sure the manual says, but I think the AC-4 delivered 12.6V and 650V at 300 mA. I don't understand how there can be so many transmitters out there without AC-4s!

CC> I'm not really in a big hurry anyway. If the TR-4C comes up ok,
CC> I've got to go out and get my ticket and I'm not sure I'm ready
CC> to start aggravating the neighbors. :)

Oh well...should make a good receiver while you listen around. No hurry about ham radio -- licensing or restoring. It's a HOBBY, after all.

--Andy

P.S. -- I'm enjoying this conference immensely! Unfortunately no

messages came through all weekend and I was really disappointed.....

I welcome tube nostalgia correspondence to P. O. Box 395, Chelmsford, MA 01824....

... Kill WORLD BAND RADIO and bring back Short-Wave!

From ab4el.com Tue May 31 20:53:02 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: Drake phone patch. Old.

ul> From: Hugh D. Stegman <ulowell!red-eft.la.ca.us!driver8>

ul> Look at the name of the thing... if it's called a High Patch, it's

ul> Drake from the late 50s/early 60s.

ul> I don't recall it having a RJ-11. Probably a

ul> screw terminal strip.

Model 584-A, and yes, it has a screw strip. Mine is black with white lettering, but I understand they also made one which was negative of that, with white knobs.

Just for fun I've patched my 2-B into a Gonset GPP-1 patch in the bedroom. Now I can play my logs to my SW friends directly. I got the GPP-1 for \$13 just because it was beautiful...it's the only Gonset piece I own. If they made a receiver/transmitter with the same plastic crosshatch panel and chrome trim, it must have been a beauty.

ul> Drake also made the best low-pass filter, a TV-1000-LP. It had four
ul> pi sections, I think, and was about the size of an 813 tube, but square
ul> and very, very well built. Had a copper box you could bolt right onto
ul> the ground buss. There was also the high-pass companion, which hung on
ul> the TV terminals and might even have worked if grounded properly. It
ul> was reputed to be one of the few HP filters worth bothering with.

I've never seen the HP filter, but supposedly it was built into a pill box.

I'd be very interested in hearing about early Drake stuff and history. I didn't know they made anything before the 1-A receiver -- which I do _NOT_ own, so please don't burgle my house! <grin>

--Andy

... Curly: "Ohhhhhh, short wave?" Moe: "No. Permanent!" <<BONK>>

From ab4el.com Sun May 29 18:24:16 1994

From: Hugh D. Stegman <driver8@red-eft.la.ca.us>

Subject: Re: Drake phone patch. Old.

John (WB50AU) writes:

>[...] I found a Drake phone patch.... looks to be 50's vintage [...]

I'd forgotten about that!!!!

Look at the name of the thing... if it's called a High Patch, it's Drake from the late 50s/early 60s. As but a young hamlet at age 10 or so, I was given one of these by one of the big DXers of the time, who I really looked up to. He told me it was a good phone patch, and made me swear that I'd use it. I did. I guess it was a good phone patch. This was still the era when you unplugged these things at night when Telco tested the lines. I don't recall it having a RJ-11. Probably a screw terminal strip.

Drake also made the best low-pass filter, a TV-1000-LP. It had four pi sections, I think, and was about the size of an 813 tube, but square and very, very well built. Had a copper box you could bolt right onto the ground buss. There was also the high-pass companion, which hung on the TV terminals and might even have worked if grounded properly. It was reputed to be one of the few HP filters worth bothering with.

Hugh NV6H

"I'm a ham radio operator in Los Angeles, you have a call from a Lt. Schmidlap on Johnson Island..."

From ab4el.com Sun May 29 22:27:25 1994

From: "J. D. Delancy" <k1zat@bah.com>

Subject: Re: Drake phone patch. Old.

On Sun, 29 May 1994, Hugh D. Stegman wrote:

> Drake also made the best low-pass filter, a TV-1000-LP. It had four pi
> sections, I think, and was about the size of an 813 tube, but square and
> very, very well built. Had a copper box you could bolt right onto the ground

Still have mine and still in use. heck of a filter!

jd

From ab4el.com Tue May 31 20:53:54 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: Drake SW-4A

CC> From: ulowell!thumper.bellcore.com!cotton (Chase Cotton)

CC> I'll get a manual probably next time I see one at a fest. I'll
CC> send email to you then and you can send me an address for a copy.

Yes, indeed, or at the very least, a schematic. Thank you!

I'd >> prefer the R-4B since that has the 4.8, 2.4, 1.2, and .4 filters,
>> and you have control over the BFO. But then I've been more of a SW
>> broadcast DXer.

CC> On R-4B vs. R-4C, I'm a SWL too and never noticed that difference
CC> before (4 std. filters vs. 2). Osterman says the '4C can have
CC> optional .25, .5, 1.5, and 6 filters, but getting them "now" would
CC> be an extra hassle. Thanks. That tip opens up my sights a bit.

I don't have any clear photos of the R-4C front panel, but I'm pretty sure that the filters were selected as dependant on mode. In other words, .25/.5/1.5 on CW only, probably 2.4 (inside the rig) for SSB, and 6 for AM only. You'd have to talk to an owner. The -C did have AVC independent of mode, though, which was probably handy. But the R-4B would probably be a better choice for SWLing, given the 4 filters I'd mentioned. Passband tuning, 4 filters, readout to a kHz, and a nice notch filter -- wish I had a R-4/A/B when I started SWLing, instead of the HRO-50! (6.0 to 6.1 MHz was about this wide: | | with a pointer this wide: || <grin>

The R-4C has 15 auxiliary 500 kHz crystal positions; the earlier models have 10. There was also the SPR-4 which was supposed to be solid-state... That has 24 ranges.

>> I also need the value for the tone pot (mine is missing) ...

CC> Well let me see. I'm not going to start the clock until I clear
CC> the stuff off the top of the '4A ...

Tsk, tsk! Keep those tubes cool.....

CC> ... 16 minutes later ... didn't expect that to take more than 5
CC> minutes. Now I know why my tone control never worked very well.
CC> The hookup is a little strange. One end of the pot's resistor is
CC> soldered to the pot's case. The middle (wiper) and the other end
CC> of the pot's resistor are tied together and then feed off to the
CC> cap. The tone still works, but not like it should.

Well, apparently it just acts as a high-cut control, so it's probably the way it's designed to work.

CC> I'm not really in the mood to pull
CC> this one apart now as as I've got three in the basement with
CC> their guts hanging out already.

Three other SW-4As?!?! I could use some parts...mine was a highly modified unit. I need the dial, the knob, the knob kHz skirt, and probably the case (mine doesn't have the loop hole but the chassis does), and ALL the crystals! (See my WANT LIST earlier for freqs.) I could also use a few knobs. I don't suppose you could spare any of these?

CC> Next time I get into it, I'll rotate the pot and see what the
CC> value is and send the number to you. I never had the bottom off
CC> before. Probably's never been off. Copper shown like new.

Yep, those copper chassis are pretty when they're clean. OK then, I'll watch for the pot value...I imagine a RS equivalent would be fine (I was afraid it was a dual unit or something).

CC> Have you ever seen the MW loop unit that goes with a SW-4A? (it
CC> plugs into the 1/4" phono jack in the chassis seen through the
CC> hole in the top of the case.

That's the AL-4 loop. When I was at the Boxborough (MA) ARRL fest in ...um... 92? I saw a fellow with an SW-4A and the loop, and also an SPR-4, both in beautiful shape. Unfortunately, he would only sell them paired with transmitters. Out of my budget. Instead I was happy to find an R-4A for \$150. (That needs attention again; something died after I had calibrated it ... hopefully simple (like a tube)... It was a real performer while it was peaked up, though. I had DLR-106 from Ireland on 6226 in the AM mode, 2.4 kHz filter, and an INDOOR wire antenna! Not bad for 1965 technology.)

Anyway, I saw an ad in the HTYS last month for an SW-4A with loop and original box for \$125. I called the same day and I was caller number 30 or something...oh well! :-)

Great talking at you!

--Andy

... A ham yells into the radio; but a SW Broadcast DXer yells at it!

From ab4el.com Mon May 30 17:12:33 1994
From: Richard E Robinson <rerobins@uncc.edu>
Subject: Drake/RS receivers

Does anyone remember the 2 receivers Drake supposedly made for the Shack in the early '70s? They were identical except the SWL model covered 5 or 6 SWL bands instead of 80-10 for the ham band model. I think they were the AX-125, ham band model, and the SX-125 shortwave model. I've seen them occasionally at hamfests with \$100 - \$150 price tags on them. Anyone ever owned one or know for sure if this is true or just another Joel Furr urban legend.

Rick kf4ar

From ab4el.com Tue May 31 20:53:00 1994
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
Subject: Drake/RS receivers

ul> From: Richard E Robinson <ulowell!uncc.edu!rerobins>

ul> Does anyone remember the 2 receivers Drake supposedly made for the
ul> Shack in the early '70s? They were identical except the SWL model
ul> covered 5 or 6 SWL bands instead of 80-10 for the ham band model. I
ul> think they were the AX-125, ham band model, and the SX-125 shortwave
ul> model. I've seen them occasionally at hamfests with \$100 - \$150 price
ul> tags on them. Anyone ever owned one or know for sure if this is true
ul> or just another Joel Furr urban legend.

If you're thinking of the Allied AX-190 and SX-190, then it would surprise me if Drake made those... My Ham Trader Yellow Sheets guide shows em, but with fuzzy pictures. Looks like a Realistic product to me...readout is to 200 Hz apparently (but I can't tell what the analog dial looks like). You could get an accessory range for the above, but only 3.5-10 MHz -- it would surprise me if Drake would do that, even with their name not on it.

But then, Drake did make the SSR-1, which was a Japanese manufactured disappointment! <grin>

Let me know if you find out info.

---Andy

... Drakes: black 'n' grey and they keep your cat warm...

From ab4el.com Wed Jun 1 14:43:52 1994
From: tech@cs.athabascau.ca (Richard Loken)
Subject: Drake/RS receivers

RE: AX-192/SX-190

Steve says:

> Actually, to be REALLY correct, I should say TRI0! :-) I worked on
>some of these when I did repair work for Madison Electronics. Looked like
>the receiver half of the 599 "twins".

Actually Kenwood is Trio. When they first started marketing in North America
it the late 60's, the Trio gear was marketed in Canada as Trio and in the USA
as Kenwood. Later the Kenwood name was marketed in Canada as well. Trio also
made a tube receiver for Lafayette at one time did they not - looked like your
vanilly communications receiver with a rectangular sliderule dial and 4 or 5
bands on it.

Anybody know why Kenwood was chosen as the marketing name in North America.
Is Trio still the marketing name in Europe? Australia? Japan?

Richard Loken VE6BSV, Systems Programmer - VMS : "...underneath those
Athabasca University : tuques we wear, our heads
Athabasca, Alberta Canada : are naked!"
** tech@cs.athabascau.ca ** : - Aurthor Black

From ab4e1.com Wed Jun 1 10:24:17 1994
From: linscot@is.rice.edu (Steve Linscott)
Subject: Re: Drake/RS receivers

>
>To:Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)
>From:linscot@is.rice.edu (Steve Linscott)
>Subject:Re: Drake/RS receivers
>
>ou're thinking of the Allied AX-190 and SX-190, then it
>>would surprise me if Drake made those... My Ham Trader Yellow Sheets
>>guide shows em, but with fuzzy pictures. Looks like a Realistic product
>>to me...readout is to 200 Hz apparently (but I can't tell what the
>>analog dial looks like). You could get an accessory range for the above,
>>but only 3.5-10 MHz -- it would surprise me if Drake would do that, even
>>with their name not on it.

>>
>> But then, Drake did make the SSR-1, which was a Japanese
>>manufactured disappointment! <grin>

>>
>> Let me know if you find out info.

>>
>>---Andy
>>
>>... Drakes: black 'n' grey and they keep your cat warm...

>
>
> The AX-190 and SX-190 were made by Kenwood.

>
>

- Steve -

Actually, to be REALLY correct, I should say TRIO! :-)) I worked on some of these when I did repair work for Madison Electronics. Looked like the receiver half of the 599 "twins".

- Steve -

```
*****
*   Steve Linscott, W5EGP           *
*   Office of Computing Services    *
*   Rice University                 *
*   Houston, TX                     *
*****
```

From ab4el.com Wed Jun 1 11:25:50 1994
From: Richard E Robinson <rerobins@uncc.edu>
Subject: Re: Drake/RS receivers

This sounds like the pair, AX/SX-190. I've never owned one but I remember the rumors when they were new that Drake made them for RS/Allied. I seem to remember looking at one and seeing Made in USA on it. I doubt they are worth the asking price I've seen, when 2Bs and 2Cs can be had for less.

Rick kf4ar

From ab4el.com Wed Jun 1 16:42:10 1994
From: Jeffrey Herman <jherman@uhunix.uhcc.Hawaii.Edu>
Subject: Re: Drake/RS receivers

Amazing! I worked at a Radio Shack store as a young pup - we carried the SX-190 and AX-190 - all this time I thought they were made by Allied Radio. Now I find out they were Kenwood!

Jeff NH6IL

From ab4el.com Wed Jun 1 17:24:01 1994
From: William Martin <check@STL-06SIMA.ARMY.MIL>
Subject: Re: Drake/RS receivers

>From: Richard Loken <tech@cs.athabascau.CA>
>Anybody know why Kenwood was chosen as the marketing name in North America.
>Is Trio still the marketing name in Europe? Australia? Japan?

It's a legal-ownership-of-trademark thing. I believe Trio is used everywhere but the US, and Kenwood only in the US. Somebody else owned the "Kenwood" name outside the US, and a different firm owned "Trio" in the US when the company began to sell its products here.

We see the same sort of thing for "Crown" electronics -- they use a different name overseas.

Will

From ab4e1.com Thu Jun 2 05:03:31 1994
From: "PMD G.SIFAKIS" <pmdsif@isoft.intranet.gr>
Subject: Re: Drake/RS receivers

> Anybody know why Kenwood was chosen as the marketing name in North America.
> Is Trio still the marketing name in Europe? Australia? Japan?

The Kenwood name also appeared in Europe in the late 60s. Trio was never adverized as such, you could only see it on the logos.

Geogre SV0KA

From ab4e1.com Thu Jun 2 01:09:32 1994
From: bill@rosevax.rosemount.com (William Hawkins)
Subject: Dual Diversity

A while ago, I picked up the center part of a Hallicrafters DD-1, along with some articles on the DD-1 and a bottom plate, which I assumed was for the DD-1, with a schematic on it. I came across the plate again tonight, while looking for my R390 manual for Roy's problem.

The 15.5 by 16.5 plate is for a CV31C/TRA-7, not the DD-1 at all. The schematic has 15-20 tubes of the 5Y3, 6H6, 6V6, and 6Sxn types. Two of the 6V6's near the output are labelled MARK and SPACE. There are inputs for Receiver A and B. So it looks like one of those diversity combiners for an RTTY station. A quick grep of my meager archives did not find any file containing CV31.

Does anybody know about the CV31? Does anybody need a bottom plate for one?

Bill

From ab4e1.com Tue May 31 16:57:53 1994
From: Nick England <nick@cs.unc.edu>
Subject: Durhamfest results

Went to the Durham, NC fest Saturday. This is a relatively small tail-gate affair.

KWM-2 \$450
HQ-180 \$250 unsold
HQ-150 \$50 I couldn't resist
NC-109 \$15 ditto

a couple of TR-4 xcvs
Clegg 22'er (remember them?)
Johnson 6N2 \$40
several Swan xcvs

R-1051
otherwise very little military gear

Hallicrafters Sky Champion ? (sorry, don't know old Hallicrafters well)
Echophone CR-1 ?? not sure of model

A friend said he just missed a nice Harvey-Wells rig - I never even saw it.

So not an *outstanding* day for boat-anchory, but you never know what's gonna show up in the back of someone's car. NA4G, Bob, what did you see ??

Results - the HQ-150 works swell. Had a bunch of people at the fest tell me it was a good rcvr and I have to agree. It has no original knobs. All donations gratefully accepted !! A friend says he's gonna send me a copy of the manual.

The NC-109 was represented as "doesn't work, probably blown power xfmr" but I figured what the heck, for \$15 I can't go wrong. Main problem was a flakey power cord - xfmr was OK !! Also the electrolytic can had dried out so I just paralleled some good caps in place and it works fine! I need a manual if anyone has a copy.

THE BIG SURPRISE

Kids - don't try this at home !!!!!!!
I just wasn't paranoid enough. I plugged in the HQ-150 without putting my VOM to it first. Turns out one of the AC lines was shorted to ground (maybe through bad bypass cap). I found this out (VERY LUCKILY) not with my very own body, but when I hooked up the signal generator ground clip to the antenna terminal - FLASH, BANG, SMOKE, JUMP BACK !!

I just gotta keep reminding myself - this ain't no wimpy 5v computer junk - this is the REAL THING and you gotta treat it with respect !!!!
Smokey says: Ohm it all out before putting the juice to it.

Nick KD4CPL
nick@cs.unc.edu

From ab4el.com Tue May 31 17:56:48 1994
From: larry wise <lewise@bga.com>
Subject: DX-40 Manual needed

Hi tube fans...
I have come into possession of a DX-40 that looks like never worked.
The wiring was real bad (looked the work of a beginner with no elmer) and the B+ can't be right. Would like to put it right but need a manual or as a last resort just a schematic. If you can help please email me.

KA5T

--

Larry E. Wise lewise@bga.com
Georgetown, Tx
512-863-5870

From ab4el.com Wed Jun 1 12:40:15 1994
From: Jerald Pendleton <jerald@wrs.com>
Subject: Fair Radio Address/Telephone.

sorry sorry sorry
I lost the mail message that has Fair Radios mail and telephone number.

If some kind soul would republish, I *promise* to write it down this time.

These darn tubeless computers are so unreliable.....

TNX
Jerry Pendleton
KC6RT0

--

Jerald R. Pendleton Email: jerald@wrs.com, Personal Email: jrpend@netcom.com
The preceeding message represents only the opinon of the author. This do not represent the opinions/positions of Wind River Systems, my mother, my wife or my poodle.

~~

From ab4el.com Wed Jun 1 14:05:23 1994
From: "Roy Morgan" <morgan@speckle.ncsl.nist.gov>
Subject: Re: Fair Radio Address/Telephone.

On Wed, 1 Jun 1994 09:04:46 -0700 (PDT),
Jerald Pendleton <jerald@wrs.com> wrote:

>sorry sorry sorry
>I lost the mail message that has Fair Radios mail and telephone
>number.

Fair Radio Sales (Lotsa military surplus. Rare tubes can be found
PO Box 1105 here. Also a source for transformers, etc.)
1016 East Eureka Street
Lima, OH 45802
(419) 227-6573 or (419) 223-2196 VOICE
(419) 227-1313 24-HOUR FAX

Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899
301-975-3254 Fax: 301-948-6213 Internet: morgan@speckle.ncsl.nist.gov

From ab4el.com Mon May 30 13:19:01 1994
From: Jerald Pendleton <jerald@wrs.com>
Subject: Firebottle testing in the SF Bay Area?

Greetings to all who own re-enforced card tables -

Any Bay Area BA fans?

Well, the last place I knew that had a do-it-yourself tube testor locked
its doors and is no more <flick tear from eye>.

Does anyone know somewhere that has one of those tube testors. Preferably
some place where sales clerks won't look at you funny? (like they did
a Quemont).

QTH is Castro Valley...

I suppose I should break down and buy one. How much should I pay for
one? (I haven't been to a swap meet for over a year). What I'd really
like is one of those RCA Do it yourself tube centers you used to see in
every 7-11 in the country.

Does the Livermore swap meet still happen? How about Foothill?
(I've really been out of it - but getting back in ;-)).

Thanks

Jerry Pendleton
KC6RT0

Jerald R. Pendleton Email: jerald@wrs.com, Personal Email: jrpend@netcom.com
The preceeding message represents only the opinon of the author. This
do not represent the opinions/positions of Wind River Systems, my mother,
my wife or my poodle.

~~

From ab4el.com Mon May 30 14:47:51 1994
From: Jerald Pendleton <jerald@wrs.com>
Subject: Firebottle testing in the SF Bay Area?

Greetings to all who own re-enforced card tables -

Any Bay Area BA fans?

Well, the last place I knew that had a do-it-yourself tube testor locked
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every 7-11 in the country.

Does the Livermore swap meet still happen? How about Foothill?
(I've really been out of it - but getting back in ;-)).

Thanks

Jerry Pendleton
KC6RT0

Jerald R. Pendleton Email: jerald@wrs.com, Personal Email: jrpend@netcom.com
The preceeding message represents only the opinon of the author. This
do not represent the opinions/positions of Wind River Systems, my mother,
my wife or my poodle.

~~

From ab4el.com Mon May 30 16:02:20 1994
From: Terry Murphy - AB4VJ <ab4vj@mercury.interpath.net>

Subject: Re: Firebottle testing in the SF Bay Area?

Re: Cost of tube checkers

There are usually 3 or 4 at each swap meet I attend (more at the larger ones) and they seem to be in the \$35-50 dollar range. These are the smaller 9 to 12 socket jobs with the larger meter. Often see the mil types at the same range.

MAKE SURE YOU GET THE MANUAL AND LISTING OF TUBES AND SETTINGS!!!!!!!!!!

I did find a nice compact DynaJet tester for \$10 at Greenboro last year, but you had to be early. Often, better prices can be had at the end of the day after the crowd leaves....

73 de ab4vj ..

From ab4el.com Thu Jun 2 14:24:57 1994
From: Paul (GW7KES) <pdu@unixa.nerc-barry.ac.uk>
Subject: For Don Merz

Sorry about this, but I've temporarily mislaid your address.

Is the type 22 still available?

Paul
~~~~

From ab4el.com Wed Jun 1 14:37:20 1994  
From: "MELUCAS, MARC P." <MELUCAS@wsmc-mis.af.mil>  
Subject: Fred Terman's Book

Hi Gang!

I remember a few weeks ago a thread about Mr Terman and his book (books?) made it's way through the list. I have an extra one. Specifically, it is the Radio Engineer's Handbook, by Fred Terman, copyright 1943, and in excellent condition. I offer it for sale, to the best offer (I have no idea of it's value, but would like to see it go to a good home). Anyone interested?

Marc, KB0JPQ  
MELUCAS@wsmc-mis.af.mil

From ab4el.com Tue May 31 11:29:53 1994  
From: "Ferranti Rick" <ferranti\_rick@atc.ll.mit.edu>  
Subject: Freebie BA's in the Boston Area

Fellow BA'ers:

Following is a list of (mostly BA) radio/electronics stuff that I'm not interested in keeping around the basement anymore. It's available free to anyone willing to pick it up. I'm in the Boston area. The only condition is that you have to take it all! (hint: bring a station wagon...). You also get a chance to talk me out of anything else you see in the basement, but for that you'll have to bring me a telegraph key as a trading item.

-- Rick Ferranti WA6NCX  
email replies to: remler@ll.mit.edu

Free BA's:

- BC-645A WWII 470 MHz IFF transceiver, unmodified
- Eico 360 Sweep Generator w/manual, working
- Heathkit electronic switch model S-2
- Tektronix 606 monitor (5 MHz solid state scope) with sweep option , with manual, has bright sharp trace but sweep ckt needs work
- Tandberg 64-62 stereo reel-reel recorder w/manual, tapes, cool dual electronic eye tubes
- Elmac CD-10 10 meter AM transceiver, hollow-state, w/manual, sorta works
- Q-5er LF ARC-5 receiver, converted
- Lafayette Comstat 23 Mark 5 23 channel tube CB
- telephone test panel w/power supply
- ballast lamps, tube sockets, other misc in three boxes
- 60's Ford auto radio, xstr AM pushbutton
- 5v, 12 volt switching power supply

From ab4el.com Wed Jun 1 21:21:23 1994  
From: Mark Shelhamer <ms@space.mit.edu>  
Subject: Freq Meter Manual

I have a manual for the SCR-211 (BC-221) Frequency Meter. Manual number TM 11-300 (July 1944), with addendum (April 1945). Cover is in fair condition, inside is in good condition. It can be yours for the price of postage.

Mark

From ab4el.com Thu Jun 2 12:49:45 1994  
From: lewisd@grassman.gvg.tek.com (Lewis Dobbins)  
Subject: Re: Freq Meter Manual

Hi Mark

I would be glad to pay your price. Send me an address to mail you postage and I will get it going. It just so happens that I have a SCR-211 without a manual.

73  
Lew

\*\*\*\*\*

|                         |                                     |
|-------------------------|-------------------------------------|
| Lewis M. Dobbins        | Test Engineer                       |
| Grass Valley Group Inc. | Operations Engineering              |
| Box 1114 M/S N4-2E      | Voice: 916-478-4064                 |
| Grass Valley, CA        | Fax: 916-478-4194                   |
| 95945                   | E-Mail: lewisd@grassman.gvg.tek.com |
| WD6GJR                  | VAX: Dobbins@gvg47                  |

\*\*\*\*\*

From ab4el.com Tue May 31 20:50:55 1994  
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)  
Subject: Globe King

FROM: ulowell!anarky.enet.dec.com!brewer

ul> Hey Andy! Which issue has the Globe king stuff!!! :\_)

ul> /john (a new globe king-er)

Sorry, John, I must have been mistaken. I just checked the indexes and didn't see any articles specifically on the Globe King... I'm not done reading the back issues though and will let you know if there are any restoration tips or anything. Leo Meyerson was featured in an early E/R interview though.

I saw a Globe Sidebender at the last 'fest. Hmm, why don't I upload my "review" of it?

--Andy

... Kill WORLD BAND RADIO and bring back Short-Wave!

From ab4el.com Wed Jun 1 00:04:35 1994  
From: Fire Bottle archive handler <firebotl@jackatak.raider.net>  
Subject: Grand (FM) Boatanchors

George-

> My storage shed presently has two genuine boat-anchors dwelling in it.  
Lucky you, with space for two anchors! ;^)

> The GE amp was produced in Lynchburg probably in the 60's, is marked  
> for 144-174 MC [MHz], and resides with its meters and most or all the  
> power supply in the top of a 6 foot cabinet, likely the MASTR series.  
You wanna do something nice with it? ;^)

> Question: How are others using these fine anchors?  
Well, you could give me directions to your place, and I'll help you  
appease your bride and clear some space out for yet another fine  
anchor... be patient, because getting a visa for the Research Triangle  
with Tennessee citizenship is no trivial exercise! ;^)

73,  
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

Fire Bottle Server (Boat Anchors Get Out and Keep You Warm!)  
firebotl@jackatak.raider.net  
Where Old Radios and Fun ... GO TOGETHER!  
+-----human interface: root@jackatak.raider.net -----+

From ab4el.com Wed Jun 1 09:00:32 1994  
From: "Rhett T. George" <rtg@ee.duke.edu>  
Subject: Re: Grand (FM) Boatanchors

Greetings, Jack.  
Anyone from the great state of Volunteers is welcome. Especially one  
having the same given name as the distiller of a beverage popularly  
known as "Black Jack." You will need to get to the edge of Research  
Triangle Park, but only as far as Orange County, NC, where the South  
does not have to rise again. IT NEVER FELL!

Seriously, I have little other than a lot of time invested in each of  
these and certainly do not need two (my bride may say ONE). Please  
come ahead, and patience is no problem.  
Rhett - KE4HIH

From ab4el.com Wed Jun 1 22:30:32 1994  
From: Fire Bottle archive handler <firebotl@jackatak.raider.net>  
Subject: Re: Grand (FM) Boatanchors

Rhett-

> Anyone from the great state of Volunteers is welcome.  
Shucks, I'm only \*from\* Tennessee when I'm not here! ;^)

> Especially one  
> having the same given name as the distiller of a beverage popularly  
> known as "Black Jack."  
You've heard of my trading style, I see... ;^) Ply you with Lynchburg  
Lemonade, make sure your wife knows I am willing to take a radio  
\*away\*, and act really friendly... ("Caution, trained professional. Do  
NOT try this at home!" ;^) makes far less of a dent in the wallet,  
too... that and the "Ah, shucks..."

> You will need to get to the edge of Research  
> Triangle Park, but only as far as Orange County, NC, where the South  
> does not have to rise again. IT NEVER FELL!  
Chicken Little never visited there, eh? ;^)

> Seriously, I have little other than a lot of time invested in each of  
> these and certainly do not need two (my bride may say ONE).  
Sheesh! My \*time\* is \*ALL\* I have of value! I may not be able to  
afford this after all!

> Please come ahead, and patience is no problem.  
Yours or mine? ;^)

Guess we'd better take this off the list if you are really interested  
in parting with one of those Big'uns... Don't want any Net Pholx  
offended by the crass commercialism with which we attack this deal! A  
garage needing cleaning and a world class pilferer all together in one  
place... Parental Guidance advised! ;^)

73,

Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

Fire Bottle Server (Boat Anchors Get Out and Keep You Warm!)

firebotl@jackatak.raider.net

Where Old Radios and Fun ... GO TOGETHER!

+-----human interface: root@jackatak.raider.net -----+

From ab4e1.com Thu Jun 2 08:02:42 1994

From: lakeith@wrdis01.robins.af.mil (CONTRACTOR Larry Keith;653 CCSG/SCT)

Subject: Re: Grand (FM) Boatanchors

In your message of 1 Jun 1994 at 2207 EDT, you write:

>

> Guess we'd better take this off the list if you are really interested  
> in parting with one of those Big'uns... Don't want any Net Pholx  
> offended by the crass commercialism with which we attack this deal! A  
> garage needing cleaning and a world class pilferer all together in one  
> place... Parental Guidance advised! ;^)

> 73,

Hey guys! Don't do that.. I was taking notes on how to conduct a Volunteer/Tar Heel horse trade...

Awestruck in Georgia....

73,

Larry, KQ4BY

From ab4el.com Thu Jun 2 10:10:52 1994  
From: Nick England <nick@cs.unc.edu>  
Subject: hamfest attire

Menachem's "Lift with your knees" reminded me:

I've been thinking about getting one of those OSHA back braces with suspenders (like the guys in the warehouse wear these days)  
- but with an E.F.Johnson logo on mine :-)

From ab4el.com Thu Jun 2 14:35:25 1994  
From: gganderson@augustana.edu (Kevin Anderson -7325)  
Subject: Heathkit collection for sale (FWD rec.radio.swap)

It's newer equipment, but maybe someone would be interested.  
I got this from the rec.radio.swap Usenet list. Please  
reply to Ronnie and not to me. Thanks. 73 de kevin, kb9iua

--- Forwarded message follows ---

>From: ronh@sunriv.UUCP (Ronnie Hughes)  
Subject: Heathkit collection for sale  
Date: 2 Jun 94 16:00:33 GMT

I have the following Heathkit equipment for sale:

|        |                                                    |       |
|--------|----------------------------------------------------|-------|
| SB-301 | Receiver                                           | \$100 |
| SB-401 | Transmitter                                        | \$100 |
| SB-600 | Speaker                                            | \$25  |
| SB-610 | Monitor Scope                                      | \$50  |
| SB-630 | Console (clock, ID timer, SWR bridge, phone patch) | \$50  |
| SB-650 | Digital Frequency Display                          | \$50  |
| SB-200 | Linear Amplifier #1                                | \$350 |
| SB-200 | Linear Amplifier #2                                | \$250 |

Combos: Everything \$800

|                                        |       |
|----------------------------------------|-------|
| SB-301/401/600/610/630/650 + SB-200 #1 | \$600 |
| SB-301/401/600/610/630/650 + SB-200 #2 | \$500 |
| SB-301/401/600/610/630/650             | \$300 |
| SB-301/401/600/650                     | \$225 |

The SB-301/401 combo provides USB, LSB, CW and RTTY transceive capability on the 80, 40, 20, 15, and 10 meter bands. The SB-301 also receives 15.0 to 15.5 Mhz. The SB-401 contains the full XTAL set allowing independent transmit and receive frequency control and split band operation. The SB-301 contains the 400 HZ filter but not the 6 Khz AM filter. Units are in working order but have not been used much in the last several years. The SB-650 provides digital frequency display for the SB-301.

The monitor scope can be used for transmitter monitoring, amplifier tuning linearity checks, RTTY tuning and receiver passband monitoring. Last time I used it, the horizontal sweep oscillator was not working in the scope.

The "digital" clock in the console is a motor driven device which no longer runs.

The SB-200 is a 80/40/20/15/10 meter amplifier which uses a pair of 572B tubes. Output is 600 to 700 watts with 100 watts of drive on 80 and 40 meters. Lower outputs on 20/15/10 meters. Unit #2 has lower than expected output on 15 and 10 meters and has a dent in the back and one side of the case. It likely needs new tubes which are approximately \$125. It indicates 600 to 700 watts output on 80 and 40 meters as is, but the output decreases sharply on 15 and 10. Unit #1 works well and is in good shape.

I have manuals for each unit. All prices plus shipping.

Ronnie D. Hughes, N5CSE | ronh@sunriver.com or  
 SunRiver Corp. | uunet!sunriv!ronh  
 2600 McHale Court, #125 | (512) 835-8001 ext. 118  
 Austin, TX 78758 |

From ab4el.com Wed Jun 1 12:48:18 1994  
 From: gganderson@augustana.edu (Kevin Anderson -7325)  
 Subject: Heathkit Model HW-7 (FWD for help)

This message was on the rec.radio.amateur.equipment list.  
 Can anyone help Stephen, a colleague from across the water?

Please reply to Stephen. Thanks. 73 de Kevin, kb9iua

--- Forwarded message follows ---

>From: Stephen@stevef.demon.co.uk (Stephen John Farthing)

Subject: Heathkit Model HW-7

Date: Sat, 28 May 1994 16:42:07 +0000

I recently sat the UK Radio Amateurs Exam and have bought a Heathkit HW-7 to get on the air with. Unfortunately it came without manuals.

Also I have heard that there is a publication called the "Hot Water" book with details of modifications ect.

Can anyone out there help me with these, or any other details of the HW-7?

--

Steve Farthing | stephen@stevef.demon.co.uk |  
Meklsham "Life can only be understood backwards; but it must be lived  
Wiltshire UK forwards" Soren Kierkegaard 1813-1855

From ab4el.com Tue May 31 16:03:00 1994

From: "Jack Mor" <usr8563a@TSO.UC.EDU>

Subject: Henry 3K Export 4 Sale

Someone my be want to help this guy!

Jack

usr8563a@tso.uc.edu

-----  
We are moving so I am intersted in selling my Henry 3K (export model). It has a single 3CX1200 with 4,400 volts on the plate. 65 watts of drive yields an EASY 1,500 out. It has very little time on it, maybe only about 40 filament hours on the tube. A step start and cool down cycle have been added to increase tube life.

It is possible to ship it VIA truck but it would be expensive (but worth it!) as it tips the scales and just about 200 pounds. Pick up in Virginia Beach, VA is recommended.

Asking \$2,600 (no trades, please. I have enough to move! <G>)

Drop me a note here or feel free to call:

(804) 496-8973 (H) Eves

(804) 340-1702 (W)

-73-

Chuck

WA4HHG



Chuck...

Message compiled at 23:10 on 05/26/94

---

Chuck Rippel

chuck.rippel@exchange.com

CompuServe 72571,1046 (Via GoCIS 1.01)

---

\* CmpQwk 1.401 #194 \* \*Government produces NOTHING!\*

-----

I have a Henry 3K (Export Model) linear amplifier for sale. It is about 4 years old and looks and operates as new. Amp is a floor model, 80 - 10 meters and runs a single 3CX1200A with 4,400 volts on the plate. About 70 watts drive gives an EASY 1,500 out. There are only about 40 filament hours on the tube (LOW hours!) and this amplifier tips the scales at about 200 pounds. Needless to say, it prefers 220V and DOES NOT run on 110VAC!

I have the original Box and packing thus, I could be shipped. Pickup here in Virginia Beach, VA would be best however. I am looking to get \$2,600 for it. We are moving and it will be one less thing to put on the truck!

You can write me a note here but a phone call to (804) 496-8973 after 0000 UTC would be best.

Thanks!

-Chuck-

WA4HHG

From ab4el.com Thu Jun 2 10:10:56 1994

From: "Roy Morgan" <morgan@speckle.ncsl.nist.gov>

Subject: HR0-60, HQ-129X, misc. for sale

Forwarded from rec.radio.swap:

----- Forwarded message begins here -----

>From: WaltN <waltn@aol.com>

1 Jun 1994 22:58:05 -0400

Newsgroups: rec.radio.swap

Subject: HR0-60, HQ-129X, misc. for sale

Selling following equipment to thin collection.

HRO-60 with A/B/C/D coils and crystal calibrator. Electrically excellent, cosmetically very good (usual small use scratches, very small dent right side). Includes original speaker cabinet with Jensen speaker; speaker excellent, cabinet good (some scratches and one hole on side). \$350

HRO-50/60 F coil, excellent physical/electrical. \$100

HQ-129-X; excellent front panel, good case (some scratches), mixer tube replaced with 9-pin mini. Works very well, recently aligned. \$100

HQ-129-X; good front panel, good case (some scratches), minor mechanical mods under chassis. Works very well, recently aligned. \$75

Autek QF-1 active filter. Works very well, mint. \$40

All prices plus shipping, FOB San Francisco area.

Walt Novinger (415) 738-0370 or email.

----- Forwarded message ends here -----

---

Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899  
301-975-3254 Fax: 301-948-6213 Internet: morgan@speckle.ncsl.nist.gov

---

From ab4el.com Thu Jun 2 07:46:09 1994

From: DUBE2@delphi.com

Subject: Knight Audio amp

Anyone have an old Knight-kit KG-70 amp wasting space (no rust)? I know someone who is looking for one. I think it was a 35-watt-per-chan stereo amp from the early 60s.

Thanks and 73,

Dube

AB5AP

<dube2@delphi.com>

From ab4el.com Tue May 31 12:09:54 1994

From: CHRIS \_ PRUSSING <RMCP@tundra.alaska.edu>

Subject: Magic Eyes, Hammarlust, Nuts&Volts

Hi Gang-

Maybe you spent the Holiday as I did cleaning out the garage (making room for more BAs?). Here's what I found:

Hallicrafters SX-25 Super Defiant in good condx

Several Magic Devices-CP/M microcomputers Kaypro

Lots of IBM compatible stuff-boards,etc. (usefull for machines that

keep your BA inventory and access this list).What do you need?

From ab4el.com Tue May 31 12:24:17 1994  
From: CHRIS \_ PRUSSING <RMCP@tundra.alaska.edu>  
Subject: Magic Eyes,Hammarlust, Nuts&Volts II

Hi Again-

Continuation of garage sale:

My needs:

Magic Eye tubes- 6E5, 6G5, 6U5 the 6 pin base ones  
Equipment using Magic Eyes esp. receivers like National NC-100  
early Hallicrafters, Sergeants, Meissner, etc.

Hammarlund HQ-120X or later relatives HQ-140, -150

Gear using Acorn tubes- stuff like National One Ten, NC-510  
Hallicrafters S27,S36 or just old Thirties, WWII test equipment  
with 954,955,etc acorn tubes.

And you'll have more room to park the Bimmer!

Jim Dillon RMCP@Tundra.Alaska.Edu

From ab4el.com Tue May 31 10:30:08 1994  
From: don merz <71333.144@CompuServe.COM>  
Subject: Mics, Mohawk, Miscellaneous

Ham Radio Gear For Sale

CONTACT: Don Merz, N3RHT: 47 Hazel Drive, Pittsburgh, PA 15228  
412-234-8819 (weekdays, EST).

#### MICROPHONES

Astatic JT-30 crystal mic. A few paint chips but very good overall: \$64  
Astatic JT-30 crystal mic. Nice. \$64  
Turner BX crystal bullet mic. Very good. \$64  
Turner crystal mic. Not sure of model. \$64  
Turner T-1 crystal mic. Nice. \$64  
Shure "Velvet Voice" Brown and Red. Fantastic. \$109  
Electro-Voice 611. Excellent. \$64  
Electro-Voice 638 dynamic. Very Good. \$49  
Electro-Voice 638 dynamic. Very Good. \$49  
Turner 99. Very good. \$44  
Astatic (Dukane relabeled) DN-10. Nice+. \$39  
Astatic D-104 on the G stand. Very Good. \$44  
Astatic 333 (?-not sure). Beautiful mic. \$59  
Sony electret condenser mics. Top-notch audio. 3 to sell. \$79 each.

## GEAR

Heath Mohawk. Parts rig or restoration project. \$89  
Heath Apache. Parts rig or restoration project. \$79  
Heath Seneca. Beautiful. \$149  
Gonset Communicator II. Outstanding. \$99  
Gonset Communicator III. Excellent. \$99  
Gonset Communicator IV. Rare beast but modified front panel. \$69  
Drake 2B. Cannabalized parts set. Case good. No knobs, tubes or power transformer. \$15

## MILITARY

AT-784/PRC DF loop for the PRC-25. Near-new in canvas carry bag. \$30  
H-250/U Handset for the PRC-25 and others. \$14  
AN/GRM-55A PRC-25 test set. Excellent. \$45  
SCR-284 spare vibrator supply box. Bolts onto SCR-284 jeep mount. \$19

## MISCELLANEOUS

B&W 551A coax switch. DPDT used for switching transverter or converter in and out of the antenna line. \$19  
William Nye Master key 330-001. As-new in original box. \$29  
Crystal set (I think). Small wooden box 4"w x 5"l x 2"h with 2 controls and 4 knurled binding posts. Once control is a variocoupler, the other is an old-fashioned slider with 6 contacts. I think the four binding posts are for the crystal detector and headphones. Paper wrapping around box sides is mostly torn off and the partial word "SUPE\_\_\_\_" is the only identifying mark. Cheaply made but probably not home-made. \$29

From ab4el.com Wed Jun 1 12:10:30 1994

From: QUACK <MUSCORJ@hsdwl.utc.com>

Subject: mil-spec

They (he) has moved to Florida.

I would suggest finding another seller for an R-390A.

I've (I know) of one person who had trouble with Mr. Mil-Spec.

Ron

From ab4el.com Wed Jun 1 12:14:17 1994

From: "Menachem Galatz DC" <mgalatz@panix.com>

Subject: Re: mil-spec

Hi Ron,

I would like to know about the person's experience, as I was considering buying one from MilSpec. Please provide the gory details!

Do you think Fair Radio Sales is a good place to buy one?

Thanks,

Menachem  
mgalatz@panix.com

>They (he) has moved to Florida.  
>I would suggest finding another seller for an R-390A.  
>I've (I know) of one person who had trouble with Mr. Mil-Spec.  
>  
>Ron  
>

From ab4el.com Wed Jun 1 20:14:14 1994  
From: Tim Rosaire <timros@crl.com>  
Subject: Mil-Spec Communications

Menachem,

At the end of March, I shipped one of my treasured R-390As down to Mil-Spec's new address in Florida. I didn't hear anything back from Paul Zecchino so I tried calling him at (813) 474-6818). It took me forever to reach him, but this has always been the case for him (I've always had the best luck calling him in the evenings, his time).

When I finally did get Zecchino on the line, a couple of weeks ago, he said the receiver did arrive, but that he hadn't got to it yet. I chalked the delay up to the dust not yet settling from his move, but I am a little concerned.

On the plus side, I've been dealing with Mil-Spec for years and, other than long turn-around times, have not had a single complaint about the quality of Zecchino's work. He really knows R-390As and has always been very helpful (and extremely patient) when I called him for advice.

The bottom line is that I'm still willing to give this guy the benefit of the doubt. But I WOULD like to know what Mr. QUACK is referring to when he says he knows of "one person who had trouble with Mr. Mil-Spec." Would he care to provide details?

--Tim Rosaire

From ab4e1.com Thu Jun 2 14:23:46 1994  
From: "Kasprzyk, Emil" <EFK@eng2.tracor.com>  
Subject: Military R-390a replacement

In the case of the Navy, the R-1051 replaced a lot of the R-390s. Now the R-1051 is being surplused and I'm not sure what is replacing it.

Yes the Air Force is used Racals but they are using Watkins-Johnson and Collins 651s also.

I notice that the military is still using R-390As--see the requests go out for spare parts every few months on the DOD logistics CD-ROM.

Emil KC5IZ

From ab4e1.com Tue May 31 17:35:14 1994  
From: "Menachem Galatz DC" <mgalatz@panix.com>  
Subject: MilSpec Com: where are you?

I've tried calling MilSpec at 401-783-7106 for a week now, and no answer. Are they still in business?

Anybody have a recent price on their reconditioned R390A's? I've heard anywhere from \$679 to \$850.

From ab4e1.com Wed Jun 1 07:45:33 1994  
From: steve@hi.com (Steve Byan)  
Subject: Re: MilSpec Com: where are you?

Mil-spec Communications has moved to Florida, according to their ad in the May "Monitoring Times":

Mil-spec Communications  
P.O. Box 633  
Englewood, FL 34295-0633  
(813) 474-6818

Regards,  
-Steve

Steve Byan (steve@hi.com)

From ab4e1.com Thu Jun 2 16:16:21 1994  
From: rdkeys@csemail (R. D. Keys)

Subject: Re: modeling of a jpole

REGARDING MODELING J-pole ANTENNAS and the basic design of a J-pole.....

>  
> Nope. would the short be below the feed point?

Yep..... see below, and your diagram is about right but don't forget  
the feed goes across both sides of the matching stub (bottom of the J).

>  
> |  
> |  
> |  
> |  
> |  
> |  
> |  
> |  
> |  
> | |  
> | |  
> | |  
> | |----feed  
> |--|

>  
> will give it a try when i get home.

> end

> the views expressed here are the author's

> C. Harper harper@huntsville.sparta.com or kd4qio@amsat.org

> KD4QIO

> SPARTA Inc (205) 837-5282 x1216 voicemail

> 4901 Corporate Drive (205) 830-0287 FAX

> Huntsville AL 35805

> "we have met the enemy and he is us." w. kelly

>

The short is at the bottom of the feed line stub.

Remember what a jpole is..... a half wave radiator end fed with a shorted  
quarter wave stub by tapping up on the shorted stub from the voltage  
nodal point.

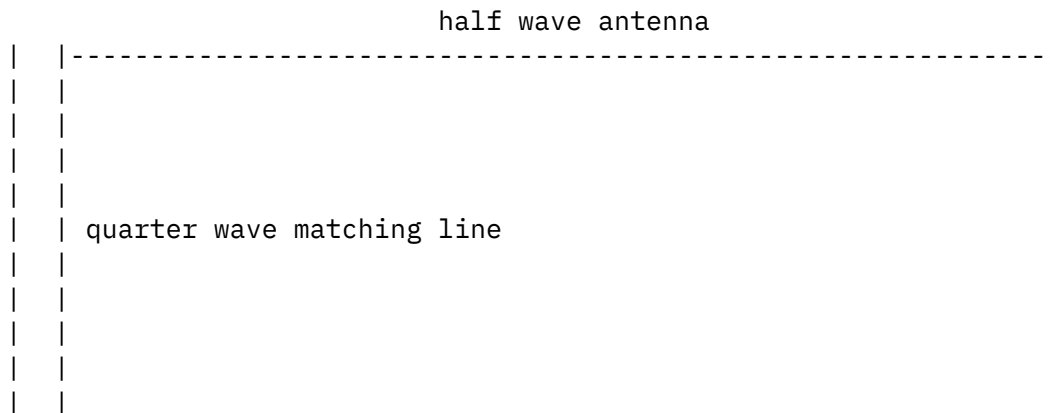
You can end feed it with an open stub, but the impedance becomes some 600  
ohms rather than 50 ohms..... bad SWR if you worry about such things.

Think of what the quarter wave matching stub is doing..... transforming  
the very high impedance of the end of a half wave down to a lower value.

If the stub is open that value is around 600 ohms. If the stub is shorted you tap up the stub from the short to feed at whatever impedance is desired, including 50, 72, 90 ohm coax, 110 ohm zip cord, 300 ohm twinlead, or the classical 450, 600 or 800 ohm open wire line, etc. It really does not matter.

In reality it is a classic end fed Hertzian antenna dating from about the wwI era that someone got the bright idea back about 1930 to fold upright into a vertical..... (:+}}..... not practical on 80 meters, but definately workable on 20 meters and up.....all the way to 70cm. I am not sure who it was, but John Reinartz was doing a lot of 5 meter work back about that time..... There are probably more than a few who did early experiments with the basic design.

Look in the mid 30's handbooks (ARRL and otherwise) and you should see several types of design for the classic J-pole antenna on 10 or 5 meters.



high impedance feed if open (600 ohms)

low impedance feed if shorted and fed up from the 0 ohm short.

Now, bend the whole into line vertically and you have a J-pole antenna. Traditionally, since coax feed is used, a shorted stub is also used.

In the 30's, open wire line was almost always used, unless hard tube coax feed was used (in a few commercial designs, hams could not usually afford hard coax in those days).

Now, if you want to model the thing it is only a half wave vertical type configuration. The matching stub has essentially no effect on the radiation pattern, but serves merely to feed the antenna via impedance transformation.

Any Boatanchorites want to comment to help this guy out?

The reason I am bouncing a copy to BA is because too few folks realize that the J-pole is an ANCIENT BOATANCHOR antenna..... YEAH!!!!



Any of the OT's aboard have any prewar stories about the J-pole?

Good Luck...

Bob  
NA4G

From ab4el.com Wed Jun 1 12:58:15 1994  
From: "Menachem Galatz DC" <mgalatz@panix.com>  
Subject: More on MilSpec

I just called MilSpec in Florida.

They sell reconditioned R390A's for \$895!?! WOW. They also have 388's (I didn't ask how much)

I then asked what it would cost to recondition a R390A that one sends to them. She said that you send the radio with a \$200 deposit, and then they check it out and then tell you what its going to cost, and they spend 8-10 weeks doing the job.

One could really get taken for a ride: so how reputable are these people?  
Any comments guys?

Menachem

Lift with your knees, bro's

From ab4el.com Wed Jun 1 19:23:24 1994  
From: Jon Brown <jcbrown@mailhost.tcs.tulane.edu>  
Subject: Re: More on MilSpec

>  
> I just called MilSpec in Florida.  
>  
> They sell reconditioned R390A's for \$895!?! WOW. They also have 388's (I  
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> weeks doing the job.  
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> One could really get taken for a ride: so how reputable are these people?  
> Any comments guys?

>

> Menachem

>

> Lift with your knees, bro's

>

My experience with MilSpec Communications has been very positive and entirely satisfactory. I bought an R-390A from Fair Radio "used, checked, complete" for \$365 4 years ago. It worked when I got it, but not as well as I thought it should. I brought the radio to MilSpec (they were then in Rhode Island) for an overhaul. I was not in a hurry, and in fact I was glad they would take their time working on it. The complete job cost me \$250 then, which included replacing the antenna relay, replacing the S meter, and replacing several tubes, as well as alignment, etc. The radio has worked beautifully ever since. The only repairs I have done have been routine replacing of tubes, fuses, etc.

In my opinion MilSpec Communications are thoroughly reputable. Let me add that their service has been everything they claimed technically and I have been treated courteously. In addition, I have called them several times on the phone to diagnose small problems, such as a bad rectifier tube. They spent considerable time with me and my problem and only made a small sale. Several times they have sent me tubes, bulbs, for very low prices. How much money can a business make to sell you a tube for \$5, then pack it and ship it for free? (BTW, Fair has a \$10 minimum for all orders).

In short, based on my actual experience

In short, based on my ACTUAL experience with them, MilSpec Communications has my highest recommendation.

Let me add that I have no connection with the company except as a satisfied customer.

Sincerely, Christopher Brown

From ab4el.com Wed Jun 1 22:44:24 1994

From: Jon Brown <jcbrown@mailhost.tcs.tulane.edu>

Subject: Re: More on MilSpec

>

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>

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>

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>

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Sincerely, Christopher Brown

From ab4el.com Thu Jun 2 01:40:40 1994

From: Jon Brown <jcbrown@mailhost.tcs.tulane.edu>

Subject: Re: More on MilSpec

>

> I just called MilSpec in Florida.

>

> They sell reconditioned R390A's for \$895!?! WOW. They also have 388's (I  
> didn't ask how much)

>

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> them. She said that you send the radio with a \$200 deposit, and then they  
> check it out and then tell you what its going to cost, and they spend 8-10  
> weeks doing the job.

>

> One could really get taken for a ride: so how reputable are these people?  
> Any comments guys?  
>  
> Menachem  
>  
> Lift with your knees, bro's  
>

My experience with MilSpec Communications has been very positive and entirely satisfactory. I bought an R-390A from Fair Radio "used, checked, complete" for \$365 4 years ago. It worked when I got it, but not as well as I thought it should. I brought the radio to MilSpec (they were then in Rhode Island) for an overhaul. I was not in a hurry, and in fact I was glad they would take their time working on it. The complete job cost me \$250 then, which included replacing the antenna relay, replacing the S meter, and replacing several tubes, as well as alignment, etc. The radio has worked beautifully ever since. The only repairs I have done have been routine replacing of tubes, fuses, etc.

In my opinion MilSpec Communications are thoroughly reputable. Let me add that their service has been everything they claimed technically and I have been treated courteously. In addition, I have called them several times on the phone to diagnose small problems, such as a bad rectifier tube. They spent considerable time with me and my problem and only made a small sale. Several times they have sent me tubes, bulbs, for very low prices. How much money can a business make to sell you a tube for \$5, then pack it and ship it for free? (BTW, Fair has a \$10 minimum for all orders).

In short, based on my actual experience

In short, based on my ACTUAL experience with them, MilSpec Communications has my highest recommendation.

Let me add that I have no connection with the company except as a satisfied customer.

Sincerely, Christopher Brown

From ab4el.com Thu Jun 2 11:52:18 1994

From: Joe Reda/HQ/3Com <Joe\_Reda/HQ/3Com@3mail.3Com.COM>

Subject: Re: More on MilSpec

Menachem writes:

>They sell reconditioned R390A's for \$895!?! WOW. They also have 388's (I >didn't ask how much)

Correct me if I'm wrong, guys, but I think \$895 for an R-390A of \*any\* condition is about \$700 too much!!! I suspect the price is at that level more because of the "desirability" of the '390. I'd stick to Fair Radio Sales.

\\JR KC6TXU

From ab4el.com Thu Jun 2 13:09:05 1994  
From: lakeith@wrdis01.robins.af.mil (CONTRACTOR Larry Keith;653 CCSG/SCT)  
Subject: Re: More on MilSpec

In your message of 2 Jun 1994 at 1130 EDT, you write:

>  
> Correct me if I'm wrong, guys, but I think \$895 for an R-390A of \*any\*  
> condition is about \$700 too much!!! I suspect the price is  
> at that level more because of the "desirability" of the '390. I'd stick to  
> Fair Radio Sales.  
>  
> \\JR KC6TXU  
>

Well, there's hamfest prices, Fair prices, and other dealer prices..

While I wouldn't pay \$895 for one, obviously there are folks out there that will! In this area, I can find junkers for \$75, bone yard queens for \$150 to \$250, Surplus dealer guaranteed units for \$400 to \$450..

If I understand the original post, Milcom is selling reconditioned units for \$895.. Given the cost of labor, the price of knowledge, and the cost of parts along with the 'desireability' factor, I guess that price ain't too bad..

When we restore something, we never figure in the cost of our labor and our knowledge.. If we were in business to reconditon equipment and guarantee that it meets specs, our prices would probably go up..

"How did this soapbox get in the Bone Yard?"

73,

Larry, KQ4BY

From ab4el.com Thu Jun 2 16:36:56 1994  
From: JosephWP@aol.com  
Subject: Re: More on MilSpec

>>>

Correct me if I'm wrong, guys, but I think \$895 for an R-390A of \*any\* condition is about \$700 too much!!! I suspect the price is at that level more because of the "desirability" of the '390. I'd stick to Fair Radio Sales.

>>>

I don't know where you could get a reconditioned R-390A for \$ 195! Its an absolute bargain at such a price! They are worth far more than that - though perhaps not \$ 895.

Joseph +

From ab4el.com Mon May 30 00:30:14 1994

From: Fire Bottle archive handler <firebotl@jackatak.raider.net>

Subject: More R390A help

> I still have a few questions about the R390a  
And the next batter, that sarcastic swine from Tennessee....

> 1) Is it a better receiver than the R392?  
Nope. As best I have figured, the 392 is simply a mobile version. Then again, I may be mistaken...

> 2) Is it easier or harder to repair than the R392?  
Yes... ;^)

> 3) Are there any parts on the R390A that can't be replaced if they blow? Is  
> there a modern equivalent to the parts on the R390A: can a transistor  
> replace a tube?  
Bite your tongue! ;^)

> 4) A little history: when were the R390a's made and used by the military?  
> Were they used only in the field and base, or were they ever put on planes,  
> subs, tanks. What do they weigh?  
To the first: yes, they were used in a variety of environments, which explains the ballast tube, among other things.

As to the weight: for a radio that puts out a watt of 600 ohm audio, destined for a "bitch box" (PA system), the power supply and audio deck make up about 75 of the 90 pounds one of those mechanical beauties tips in at... (follow your own advice about lifting one! ;^)

> 5) Is the sensitivity of the R390a on par with modern rigs like the NRD-535?  
Mercifully, not quite, but it is NOT as susceptible to white/phasing noise, either... if the signal is there, and your R-390A is in tune, you will hear it...and clearly.

> 6) What guage long wire would I use for an antenna on it, and should it be  
> insulated or not? How long should it be?  
Insultaed or not, get as much wire as high in the sky as you can. The trimmer knob on the upper left front will help some, but try for

everything you can with the antenna...

> 7) When purchased from Fair Radio Sales in the checked condition, are the  
> R390a's ready to function well? Can a novice learn to calibrate these  
> things with the manual?

To the first: perhaps you'd better settle for function, and leave out  
the qualitative stuff... there is an outfit in Rhode Island that does  
tune-ups and the like...

To the second: Sure you could learn to calibrate it and tune it, but  
you have to sell tickets for your first attempt, and from then on,  
it's a long and patient process... ;^)

> Thank you, and as a chiropractor, I advise you to always lift these things  
> by squatting from the knees, and lifting with your back straight.

Yep, the R-390A will reinforce that caveat! ;^)

> Thanks a lot,

You're welcome, though I'm not sure for what... the others on the list  
will no doubt treat you more kindly... ;^) Welcome, anyway.

73,

Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

Fire Bottle Server (Boat Anchors Get Out and Keep You Warm!)

firebotl@jackatak.raider.net

Where Old Radios and Fun ... GO TOGETHER!

+-----human interface: root@jackatak.raider.net -----+

From ab4el.com Sun May 29 19:50:20 1994

From: JosephWP@aol.com

Subject: Re: More R390A help

Hollow State Newsletter

Ralph Sanserino

12072 Elk Blvd

Riverside, CA 92505-3835

Joseph +

From ab4el.com Sun May 29 19:50:21 1994

From: JosephWP@aol.com

Subject: Re: More R390A help

>>>>

I still have a few questions about the R390a

1) Is it a better receiver than the R392?

>>>>

The use of 28V on the plates of the R-392 tubes (even though they were supposedly designed for this) is problematic. Tubes go bad for seemingly no reason. Their use at that voltage can cause gain problems, among other things.

Also, the mechanical filters in the R-390A give it a significant edge - the selectivity of those filters is excellent. Much better than can be had on the LC circuits of the R-392.

Joseph +

From ab4el.com Mon May 30 03:26:50 1994

From: "PMD G.SIFAKIS" <pmidsif@isoft.intranet.gr>

Subject: Re: More R390A help

> 7) When purchased from Fair Radio Sales in the checked condition, are the  
> R390a's ready to function well? Can a novice learn to calibrate these  
> things with the manual?

I remember calibrating my R390A following the manual and using a signal generator that I borrowed from a friend. The instructions in the manual are very detailed, so the task is doable. The manual is the one from Fair Radio.

George Sifakis SV0KA

pmidsif@isoft.intranet.gr

From ab4el.com Mon May 30 23:04:57 1994

From: WaltN@aol.com

Subject: Re: Nat'l LF-10 manual needed

Joe,

the service manual for the HRO-500 should be considerably more interesting and helpful than the owner's manual (not too helpful). I'll let you know what it's like when I get it.

73,

Walt

From ab4el.com Tue May 31 02:12:37 1994



From: phantom@pro-haven.cts.com (Tiffany Keller)  
Subject: Need a part for a Military PRC-90 ELT radio...

Howdy...

I know that this list is for the discussion of glow-in-the-dark typ stuff, but if I could beg a little of your time to help me locate a part, I'd really appreciate it! (And if anyone knows of a listserve for discussion of military radios and other mil. electronic stuff, That'd be a good thing for me to have to! :-)

I am in need of the battery cap for an AN/PRC-90 Pilot's rescue radio.....It's an ELT and transmits on several emergency frequencies. I will be joining my local CAP chapter soon and it'd be nice to be able to use this thing during SAR exercises...(don't worry, I won't activate any satellite locating systems with it and will only use it IAW the local acceptable procedures during bonafide drills or emergencies.....:-) )

If anyone can help me find this obscure little item I will be indebted to you! (I have a friend that has a metal lathe, but I don't have any calipers and would rather not try to measure the thread pitch to try to get him to fabricate one for me.....) Price should be less than \$5.00 and even then, it should be a solid brass piece! :-) I've found 2 extra antennas so far (They folded them over and stuck them in their pocket, so the one that came with it was a little messed up...) and I've found a source of batteries...(14VDC! Ack!), but no end-cap yet...:-(

Please help me find this beast and excuse my off-topic request.

Thanks for the help es 73!

Tiffany -- kj5gu

P.S. Please E-mail replies as this list is getting too many messages for my local access and it only takes the first 50 or so that come in.....Thanks again!

phantom@pro-haven.cts.com

---

Internet: phantom@pro-haven.cts.com

UUCP: crash!pro-haven!phantom

From ab4el.com Thu Jun 2 13:47:30 1994  
From: "Kasprzyk, Emil" <EFK@eng2.tracor.com>  
Subject: Old wives' tales suppression

Yes you can still pay \$150 for a 3TF7 from Amperite but you can still buy the non mil-spec one from them for \$25.00. Buy a new surplus one (1986 mfg. date) for Fair Radio for about \$18.00 and it is mil-spec, or buy a new mil spec surplus one from Surplus Sales of Nebraska for \$65.00. If you guys are going to insist on paying \$150 for \$25 items, I want to talk to you about a

bridge in the New York area that I would like to sell to you (it has been in my family for years!).

Emil KC5IZ

From ab4el.com Wed Jun 1 08:26:59 1994

From: lakeith@wrdis01.robins.af.mil (CONTRACTOR Larry Keith;653 CCSG/SCT)

Subject: Oldham Couplers - Torque Disc Replacements

Catalog No. 15, Small Parts Inc., lists Torque Discs Replacement - Black Acetal, in .50, .75, 1.00 inch sizes. Prices \$1.49, \$1.55, and \$3.50 respectively.

Address:

Small Parts Inc.  
13980 N.W. 58th Court, P. O. Box 4650  
Miami Lakes, FL 33014-0650  
Tel: 305-557-8222  
Fax: 800-423-9009

I hope that answers the question about replacements for R-390A PTO Oldham coupler parts.. I misplaced the original message..

73,

Larry, KQ4BY

From ab4el.com Thu Jun 2 08:47:32 1994

From: Paul (GW7KES) <pdu@unixa.nerc-barry.ac.uk>

Subject: Picture of R390 or R390A?

There seem to many people on the list that have one or both of these receivers, but over here in the U.K., I've never seen one. I was wondering if perhaps one of the R390/390A owners had Photo-CD capability on their PC, and if they'd ever taken a photo of their 390. If so would someone let me ftp a GIF, TIFF, or whatever of the radio, so I can see what one looks like?

Thanks,

Paul, GW7KES.

From ab4el.com Thu Jun 2 11:47:26 1994

From: Jerald Pendleton <jerald@wrs.com>

Subject: Picture of R390 or R390A?

>From: Paul (GW7KES) <pdu@unixa.nerc-barry.ac.uk>

>

> ...they'd ever taken a photo of their 390. If so would someone let me  
> ftp a GIF, TIFF, or whatever of the radio, so I can see what one looks like?

>

> Thanks,

Yes! Please!

All this talk of the R390 has really got my interest up.

I've put a call into Fair to get their catalog and I hope they still  
have a few.

Did anyone ever post summary description of the R390? If so, would  
they kind enough to re-post/e-mail the description?

Thanks

Jerry Pendleton

KC6RT0

---

Jerald R. Pendleton Email: jerald@wrs.com, Personal Email: jrpend@netcom.com

The preceeding message represents only the opinon of the author. This  
do not represent the opinions/positions of Wind River Systems, my mother,  
my wife or my poodle.

~~

From ab4el.com Thu Jun 2 17:15:08 1994

From: Mark Shelhamer <ms@space.mit.edu>

Subject: Picture of R390 or R390A?

Following up on GW7KES's request for an R390 photo, would people like to  
establish a boatanchor photo archive ftp site for this sort of thing?  
I have at least one photo of an R390 from a NASA history book, showing the  
thing in actual use in a Mercury launch control blockhouse. I'd love to  
distribute this photo to other interested parties, but I'd prefer to do  
so by putting it on an ftp site rather than by multiple mailings.

Since I have a scanner, I'd be happy to scan whatever people wanted to  
send me (if I don't already have it), but alas I don't think we can  
set up an anon ftp site here. (Here = Johns Hopkins in MD, despite  
my e-mail address.)

Mark WA3YNO

From ab4el.com Tue May 31 19:07:57 1994

From: klaudon@PICA.ARMY.MIL

Subject: progress...

>> He said that the receiver was too wide for CW use; he  
>> built his own filter arrangement, because even in those days, it would have  
>> cost around \$ 150 to obtain a narrow crystal filter.

>  
>Depending upon the model, some had xtal filters and some did not.  
>I will try to remember to check my books tonight and see.  
>The AC versions always had xtal filters, but some of the DC vehicular  
>models did and many others did not. Generally earlier models of the  
>312 at the very beginning of the war or even pre-war had xtals but  
>because of quartz shortages, early on, they decided to drop xtal  
>filters in mobile gear where it was not really needed. Fixed station  
>gear (as in the 342 models) usually always had xtal filters.

You're right, Bob. My dad's BC-312 came without a xtal filter. I  
now remember the conversation better - he said it did not have a xtal  
filter, just an LC IF, and to obtain THE xtal filter on the newly created  
surplus market would have cost as much as a great, newer receiver!

>  
>> I guess some people can't accept Progress.        (:+)####

>  
>What good is ``progress'' if the old gear still functions as good or  
>better than the newer overly fancy stuff. On CW it does not really

Perhaps you missed the joke - to this particular OF, even manufactured  
ladder line was newfangled junk, suitable only for "lids, kids, space cadets".  
But this is something that he could not have said on the air, because my  
dad had never operated phone during the entire time he was on the air.

>  
>Bob  
>NA4G  
>  
>Gee..... aren't boatanchors and their lore fun.....!    (:+}}.....

>  
Yup.

Kalman WD6CZI  
>

From ab4el.com Wed Jun 1 11:22:40 1994  
From: janderson@polycom.com  
Subject: Questions, questions, questions...

Can anyone help with the following?

1. I'm trying to find the model number of an old  
WWII receiver that another ham gave to me during

my high-school years, and which I subsequently traded to another high-school buddy for a Morrow transmitter (now long gone, alas). Here is a description, from memory, of the receiver:

- BC-3xx (I believe that it started with a 3!).
  - Dimensions: roughly 8" wide by 14-16" tall by 14-16" deep.
  - Frequency Coverage: Spanned 80 meters plus.
2. There was a schematic for this receiver in a book describing surplus radios (I believe this was a set of 3 slim volumes, published by CQ). The same volume contained the schematic for the ARC-5 Rcvr.. Are copies of these volumes still around?
  3. What is the typical price for a Galaxy GT-550 XCVR? I've had one sitting in my closet for years, and I'm thinking about taking it to the local swapmeet...

Thanks for any help!

- Jeff, WA6AHL

From ab4el.com Tue May 31 23:41:59 1994  
From: Mark Shelhamer <ms@space.mit.edu>  
Subject: R-1051 manual available

OK maybe this isn't exactly a classic boatanchor, but it does have two vacuum tubes so maybe I can sneak this in here....

I have available a partial reproduction of the technical manual for the R-1051/URR receiver. It is chapter 5 - maintenance. Lots of schematics, board layouts, photos, and some text. It's a repro, but I'd say it's very good quality. I would like to send it to a good home, since I have a full manual for this same rig. It's yours for the price of postage.

73  
Mark

From ab4el.com Tue May 31 11:58:49 1994  
From: "Roy Morgan" <morgan@speckle.ncsl.nist.gov>  
Subject: R-390 HELP!

'Bought the only R-390 seen at the Howard County Hamfest (Got there early!) So now my R-390A has the company of it's parent.

Now, to make it run!

The following "changes" have been applied by some less-than-perfectionist:

- 1) Wire from AC fuse to power input filter was bypassed.
- 2) Connection from power transformer terminal 3 to power micro switch was bypassed. Pin 1 of power module male and female connector was bent. Surgery performed successfully to restore bent male pin: moderately good connection restored. (Bypass wire still in place, set turns on and off fine.)
- 3) Both 6082's were replaced with tube bases having two diodes each from plate to cathode pins (These are the size of a 1N4001, and I suspect these were zeners now all blown.) Plate voltage on both 6082 sockets is 425 dc., and there's no filament voltage present, ac or dc. Set appears to have no B+.
- 4) Added 2-watt resistors at the 26Z6 rectifiers - at least one loose wire there. 25Z6's both present and glowing, both new 24 volt 837 pilot lamps glow happily)
- 5) Black power-resistor-shaped rectifier in power module jumpered with diodes. (Antenna relay operates.)

Ballast tube missing, PTO tube dark. (I do have a replacement ballast tube.)

Sooo...

- 1) Is there a mod to replace the 6082's with 6080's? I've got plenty of 6080's, and have never seen a 6082. I also have a spare tubeless audio/regulator module, given to me as a premonition 3 days earlier!
- 2) Are power connectors available?
- 3) Does the "Remote Control" plug need to be jumpered to get the B+ running (or is it the 6082 "fix")?

---

Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899  
301-975-3254 Fax: 301-948-6213 Internet: [morgan@speckle.ncsl.nist.gov](mailto:morgan@speckle.ncsl.nist.gov)

---

From ab4e1.com Thu Jun 2 15:54:45 1994  
From: "MELUCAS, MARC P." <MELUCAS@wsmc-mis.af.mil>  
Subject: R-390A's

Gang-

Since Emil mentioned that parts for R-390A's are still purchased by DOD, That reminded me of what I have occasionally seen at the DRMO (Defense Reutilization Marketing Office) here at Vandenberg: complete R-390A's WITH meters, maybe one or two per sale, every two months. Unfortunately, they were not much to look at, and were in large lots with alot of ugly junk. This strikes me as odd, given the widely known reasons for removing the meters when surplusd, and that this happens in Santa Barbara County, California, a very environmentally strict jurisdiction.

Marc, KB0JPQ

From ab4e1.com Thu Jun 2 19:47:10 1994  
From: "Menachem Galatz DC" <mgalatz@panix.com>  
Subject: Re: R-390A's

Why do they remove the 2 meters from the R390A's?

>

>Gang-

>

> Since Emil mentioned that parts for R-390A's are still purchased by  
>DOD, That reminded me of what I have occasionally seen at the DRMO (Defense  
>Reutilization Marketing Office) here at Vandenberg: complete R-390A's WITH  
>meters, maybe one or two per sale, every two months. Unfortunately, they were  
>not much to look at, and were in large lots with alot of ugly junk. This  
>strikes me as odd, given the widely known reasons for removing the meters  
>when surplusd, and that this happens in Santa Barbara County, California,  
>a very environmentally strict jurisdiction.

>

>

Marc, KB0JPQ

>

>

From ab4e1.com Thu Jun 2 14:17:17 1994  
From: "Kasprzyk, Emil" <EFK@eng2.tracor.com>  
Subject: R-390As for sale

The fellow in Ohio, who advertises every month in Electric Radio, Monitoring Times, etc. has been selling reconditioned R-390As for \$600 plus shipping cost. If you have a trade-in, the price will be less. He also does repair work and will sell some components. He had Sprague run off a lot of electrolytic capacitors for him (which tells me the R-390 commercial market is very viable) in order to supply his needs. I know he is supply some foreign customers as well as domestic hobbyists. I beleive his name is Rick Misch. I can supply exact name and telephone number if you are interested.

There was also an outfit in Canada selling R-390As for \$295 but I think these are less meters. They were advertising in QST about 4 months ago.

From ab4el.com Thu Jun 2 14:04:49 1994  
From: "Kasprzyk, Emil" <EFK@eng2.tracor.com>  
Subject: Re: Radio spies & dual diversity

In Oct. 1993, at the Belton, Texas swapfest, I met a retired F.C.C. engineer who told me that during World War II, he operated Halicrafters dual diversity receivers all day long monitoring whatever needed to monitored, Axis powers and otherwise. In 1947, this station was turned over to the new National Security Agency. I wonder if his receiver was the DD-1 someone mentioned earlier on this net?

Emil KC5IZ

From ab4el.com Thu Jun 2 11:24:09 1994  
From: lakeith@wrdis01.robins.af.mil (CONTRACTOR Larry Keith;653 CCSG/SCT)  
Subject: RAX-1 ??

One of my north GA sources (pusher?) says he has an excellent RAX-1 receiver for sale w/shock mount. Not wishing to display my ignorance, I told him that I would think about it...

Can anyone give me a basic rundown on this receiver? Good? Bad?

73,

Larry

From ab4el.com Thu Jun 2 15:25:19 1994  
From: JosephWP@aol.com  
Subject: Re: re: Re: Tube cross reference

The 7788 is in the ninth edition of Essential Characteristics.

Joseph +



From ab4e1.com Thu Jun 2 17:50:29 1994  
From: sfarmer@amoco.com (Steven L. Farmer)  
Subject: Re: re: Re: Tube cross reference

JosephWP@aol.com says:

>

>The 7788 is in the ninth edition of Essential Characteristics.

>

So what's Essential Characteristics, and how can I get a copy?  
I've been looking for something that will tell me more about the  
tube lineups I seen when I peruse Fair's catalog, but my old  
RCA manual lists only tubes used in consumer gear. A cross  
reference of some sort would be a very nice thing to have. Is  
that what Essential Characteristics is?

Steve WA5RPF  
email: sfarmer@trc.amoco.com

From ab4e1.com Thu Jun 2 18:33:44 1994  
From: Joe Reda/HQ/3Com <Joe\_Reda/HQ/3Com@3mail.3Com.COM>  
Subject: Re: re: Re: Tube cross reference

ESSENTIAL CHARACTERISTICS was GE's tube manual. It was a line-item type of  
manual, and had many more types than  
the RCA manual (most tube manuals had more than RCA -- they tended to stick to  
types they made). It is available (in its  
final edition) from Antique Electronic Supply in Tempe, AZ. I just got one  
about nine months ago, it's well worth the money.

\\JR KC6TXU

----- Previous Message

To:  
cc: JosephWP @ aol.com @ UGATE  
>From: sfarmer @ amoco.com (Steven L. Farmer) @ UGATE  
Date: Thursday June 2, 1994 04:18 PM  
Subject: Re: re: Re: Tube cross reference

-----  
-----  
-----

Steve says:

>So what's Essential Characteristics, and how can I get a copy?  
>I've been looking for something that will tell me more about the  
>tube lineups I seen when I peruse Fair's catalog, but my old  
>RCA manual lists only tubes used in consumer gear. A cross  
>reference of some sort would be a very nice thing to have. Is  
>that what Essential Characteristics is?

>Steve WA5RPF  
>email: sfarmer@trc.amoco.com

From ab4el.com Wed Jun 1 11:51:43 1994  
From: HAK1%IC%DCPP@bangate.pge.com  
Subject: re:Questions, questions, questions...

Jeff,

Re: Galaxy GT-550. I have seen the GT-550's going for between \$75 and \$150 with the power supply. Condition means everything. Functioning of the dial assembly is very critical. No power supply really pushes the value down. Having any accessories will push the value up (ie: VF0/spkr console/VOX/Cal).

As a side note, I consider the GT-550 a better radio than the Swan series but people shy away from the Galaxy's.

Howard AD6Y  
hak1@pge.com

From ab4el.com Thu Jun 2 11:53:29 1994  
From: HAK1%IC%DCPP@bangate.pge.com  
Subject: re:RAX-1 ??

Larry,

BUY THAT RAX-1 !!!!!!! I had one many years ago and wish I had it back. If you don't want it I'll take it ! They work quite well. They are fairly skinny but deep (standard for aircraft receivers). They have a nice dial but the selectivity isn't too good due to a 915kc (?) IF. There is an area on the back for a dynamoter that can take an AC supply really slickly. You can tote it under one arm. I believe they were late WWII vintage.

Howard AD6Y  
hak1@pge.com

From ab4el.com Wed Jun 1 19:05:37 1994  
From: HAK1%IC%D CPP@bangate.pge.com  
Subject: re:Re: Spy Boatanchors

We all know that the military and everyone else used R-390/R390A's for HF monitoring some time ago. What type of receivers replaced the R-390 series for military and surveillance work ? Does anyone know what is being used now as the "standard" of HF monitoring ?

Howard AD6Y  
hak1@pge.com

From ab4el.com Wed Jun 1 21:00:45 1994  
From: Jon Brown <jcbrown@mailhost.tcs.tulane.edu>  
Subject: re:Re: Spy Boatanchors

>  
> We all know that the military and everyone else used R-390/R390A's for HF  
> monitoring some time ago. What type of receivers replaced the R-390 series  
> for military and surveillance work ? Does anyone know what is being used now  
> as the "standard" of HF monitoring ?

>  
>  
> Howard AD6Y  
> hak1@pge.com  
>

My understanding is that the new standard for military HF receivers is the Racal R-2174/URR.

From ab4el.com Thu Jun 2 00:42:27 1994  
From: "J. D. Delancy" <k1zat@bah.com>  
Subject: re:Re: Spy Boatanchors

On Wed, 1 Jun 1994, Jon Brown wrote:

> My understanding is that the new standard for military HF receivers  
> is the Racal R-2174/URR.  
>

Correct. I remember when Racal came up with the R2174 and some of the "old timers" saying "Golly, Racal has gotten smart"..

jd

From ab4el.com Thu Jun 2 08:35:54 1994  
From: "Peter G. Smith" <n4zr@netcom.com>  
Subject: re:Re: Spy Boatanchors

I think the FCC, and perhaps other unnamed organizations, used a lot of Racal receivers starting with some VERY early transistor jobs.

73, Pete  
n4zr@netcom.com  
N4ZR@N4OHE (PacketCluster)

2003 Sarazen Pl.  
Reston, VA 22091

From ab4el.com Thu Jun 2 01:53:04 1994  
From: CHRIS \_ PRUSSING <RMCP@tundra.alaska.edu>  
Subject: Re:Spy Boatanchors..Watkins Johnson

Fellow Grunts-

Warning:content includes big fish that got away story.

Tucked away just inside the Capital Beltway in suburban Maryland is a small radio manufacturing op with possibly less than 100 employees assembling custom all-mode wideband receivers for...guess who. These are connected to the I.F. out of...would you believe R.L.Drake's biggest product is an all systems satellite receiver(still made in Miamisburg OH)?

The last Watkins Johnson receiver I almost owned-a WJ8718-was offered for sale along with the mint 75A4 I did snag for \$250 on-youy won't believe this-the rec.radio.swap newsgroup (sportsfans-this was just last month! We all missed it..he sold the WJ 8718 for \$350! I know this because in the process of arranging shipment of the 75A4, seller mentioned that he got a phone call from Watkins Johnson wondering why he had sold it so cheap (buyer wanted a manual?)! Now the CIA doesn't buy MSRP (sticker price), but it is generally assumed these puppies cost Uncle 4~5K. Dan Roustenkowski has one in the dash to snag WFMt! End of fish story...sad but true. Sorry you Company guys in the basement with the datascope...too bad you don't have Clipper yet...I just had to share something more clandestine than the CONFIDENTIAL stamped all over my RAS-5 manuals!  
Jim Dillon RMCP@Tundra.Alaska.Edu

From ab4el.com Tue May 31 15:40:32 1994  
From: censun1!gc@uunet.UU.NET (Gary Chatters)  
Subject: Rhett's FM amps

>The GE amp was produced in Lynchburg probably in the 60's, is marked  
>for 144-174 MC [MHz], and resides with its meters and most or all the  
>power supply in the top of a 6 foot cabinet, likely the MASTR series.  
>The Motorola AM 494 GR 2 m amp and its PP 638/U power supply reside  
>in the olive drab compact cabinet with is small enough to belie the  
>186 pounds listed in the manuals.  
>  
>Question: How are others using these fine anchors?  
>Rhett - KE4HIH

Doesn't anybody use FM simplex anymore?

Gary

From ab4el.com Wed Jun 1 08:40:27 1994  
From: "Rhett T. George" <rtg@ee.duke.edu>  
Subject: Re: Rhett's FM amps

That's a good question, Gary. Around here the simplex seems to be done  
amongst folks who fit inside a 12 mile circle. I have not caught up with  
any longer distance contacts. Maybe I should be the one to try. Thanks.  
Rhett

From ab4el.com Wed Jun 1 14:29:51 1994  
From: dev1!stang@tesla.elen.ssd.fsi.com (SnapRoll Gilstrap)  
Subject: Spy Boatanchors

Did any of you guys serve overseas at one of Uncle Sam's listening  
posts twenty or more years ago? You know, those places where the  
antenna farm was the size of a football field and in the compound  
building there were enough boatanchors to ... well, sink an battle-  
ship. I was stationed at Iraklion Air Station on Crete in '67 and  
'68. The postings from George Sifakis, SV0KA, reminded me of being  
in his part of the world at one time. The reason I ask is that I  
know we had some very incredible equipment but I can't seem to  
remember what any of it was except for the R-390s. Its been (gasp,  
dare I remind myself) over 25 years but I shouldn't have forgotten  
so much. Well, we did have a pretty good security debriefing on  
processing out and I think they did warn us to forget we ever saw  
any of that stuff. Yeah, that's it. However, I do remember we had  
equipment to cover the spectrum from DC to Daylight. We had stuff  
that would decode anything on HF. I remember one piece of equipment

that spit out a ticker tape with cw inked on it where the dots and dashes looked like digital data waveform. Several racks of equipment were dedicated to receiving (using R-390s) and unscrambling (using ?) HF overseas telephone traffic. There was some VHF and UHF gear too but it wasn't used much. Is anyone very familiar with 1960's military electronic surveillance gear?

One of the missions of our unit was to monitor and copy all of the traffic on the Turkish Diplomatic Net. All morse code, plain text or encrypted in 5 letter groups. There were 5 receiving positions assigned to this. Each position had two (2) R-390s, antenna selection modules, typewriters (all capital - military style) and headphones. It was so fascinating to watch these guys copy code. They would really get with the cadence of those 5 letter groups and I once counted the typewriter key strokes and figured they were copying 30-35 wpm most of the time. Those random 5 letter groups would give anyone fits, but when the message was in plain text it was in Turkish and these guys couldn't just sit there and copy behind the text very much. They seemed to be able to have a smoke and coffee while copying though. When it was time for a break a relief operator would come up and plug his headphone in and start listening. When his head would start to nod in time with the letters being received he signaled he was ready. The operator would keep copying and typing while he got up from his chair and then the relief man took over without missing a single letter. On mid-watch when it was usually quiet I would try my hand at copying at a typewriter if I found some cw at less than 20 wpm. It gave me a real appreciation for what those guys could do.

Well, I don't think I've given any hot secrets away with this. These days things are probably quite different and all of what we did over there is pretty much passe. But it sure was fun when time would allow to sit down at an R390A and see what was floating through the ether on that side of the planet.

BTW, I operated from the barracks with an SBE-33 transceiver and a 40 meter dipole, call sign SV0WCC, and I never had a problem getting a QSO going. Typically a big pile-up would result. Not too many hams on Crete I guess. Incidentally, I don't still owe anyone a QSL do I? There's still a few cards left.

73,

Stan

Stan Gilstrap - WB5LBH, stang@tesla.elen.ssd.fsi.com  
FlightSafety International - Simulation Systems Division  
Broken Arrow, Oklahoma

From ab4e1.com Wed Jun 1 16:03:44 1994  
From: "J. D. Delancy" <k1zat@bah.com>  
Subject: Re: Spy Boatanchors

Typewriter = MC88's. Iraklion huh? Fun, I had Karamursel.

jd

On Wed, 1 Jun 1994, SnapRoll Gilstrap wrote:

>  
> Did any of you guys serve overseas at one of Uncle Sam's listening  
> posts twenty or more years ago? You know, those places where the  
> antenna farm was the size of a football field and in the compound  
> building there were enough boatanchors to ... well, sink an battle-  
> ship. I was stationed at Iraklion Air Station on Crete in '67 and  
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> in his part of the world at one time. The reason I ask is that I  
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> remember what any of it was except for the R-390s. Its been (gasp,  
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> so much. Well, we did have a pretty good security debriefing on  
> processing out and I think they did warn us to forget we ever saw  
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> that spit out a ticker tape with cw inked on it where the dots and  
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> copying 30-35 wpm most of the time. Those random 5 letter groups  
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> it was in Turkish and these guys couldn't just sit there and copy  
> behind the text very much. They seemed to be able to have a smoke  
> and coffee while copying though. When it was time for a break a

> relief operator would come up and plug his headphone in and  
> start listening. When his head would start to nod in time with  
> the letters being received he signaled he was ready. The operator  
> would keep copying and typing while he got up from his chair and  
> then the relief man took over without missing a single letter.  
> On mid-watch when it was usually quiet I would try my hand at  
> copying at a typewriter if I found some cw at less than 20 wpm.  
> It gave me a real appreciation for what those guys could do.  
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> days things are probably quite different and all of what we did over  
> there is pretty much passe. But it sure was fun when time would allow  
> to sit down at an R390A and see what was floating through the ether  
> on that side of the planet.  
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> 40 meter dipole, call sign SV0WCC, and I never had a problem getting  
> a QSO going. Typically a big pile-up would result. Not too many  
> hams on Crete I guess. Incidentally, I don't still owe anyone a  
> QSL do I? There's still a few cards left.  
>  
> 73,  
> Stan  
>  
>  
> Stan Gilstrap - WB5LBH, stang@tesla.elen.ssd.fsi.com  
> FlightSafety International - Simulation Systems Division  
> Broken Arrow, Oklahoma  
>

From ab4el.com Wed Jun 1 17:22:43 1994  
From: rdkeys@csemail (R. D. Keys)  
Subject: Re: Spy Boatanchors

>  
> Typewriter = MC88's. Iraklion huh? Fun, I had Karamursel.  
>  
> jd  
>

Speaking of MC88's (that's the all upper case radio typewriter with  
the slant bar in the 0), mine has gone sour on the rubber platen and  
rollers. It is essentially hopeless to get repaired anymore.

Does anyone have a spare MC88 or equivalent that they don't need.



My shack would love to become its new home.....!

Maybe one will shake loose from BALand..... (:+{}.....

73 TU SU SK DE NA4G

Bob

From ab4el.com Wed Jun 1 18:11:48 1994

From: klaudon@PICA.ARMY.MIL

Subject: Re: Spy Boatanchors

A lot of hams were given their start in the hobby (including me) by a terrific high school physics teacher in Westport, CT. He is Nick Georgis, K1MAR, is of Greek ethnicity, and is retired now. Nick used to call us his "lids". He must have elmered 50 or 100 hams, or more, including students and fellow teachers alike. He helped get a retiring teacher on the air with his Novice ticket, and got the faculty to chip in for his retirement present : an HF transciever (HW or Swan, can't remember) to take with him to his retirement home.

Anyway, Nick had a few (probably lots) Greek friends in the Fairfield/Bridgeport, CT area where he lived. One of them was a ham, too, and had been one in the old country. This man once described his experiences as a radio operator in the Greek military. He had been stationed at a fixed station somewhere, with approx. 50 kw transmitter feeding an antenna farm. To change bands, all one had to do was dial into the telemetry system the desired transmit frequency. One would hear the loud kerchunking of relays throughout the system, as the transmitter final and output tank would automatically load itself up. In case you're wondering, yes, he did use this on 20 m phone when nobody was looking.

The receivers were HRO-500s. I remember him saying that he wasn't all that impressed with the receiver. I'd take one, tho, if someone offered!

Another memory from high school: I had a typing teacher in 10th grade named Frank Gilmore. He was an elderly man, who tried to be stern and military-ish, but was really a sweet guy. It turns out, he had gotten into typing and shorthand instruction because he had been a military cw op, probably during WWII. He described how he could copy way behind on the mill, at something like 60 or 70 wpm. He liked me and I liked him. I never could understand, however, how a guy like that could have NO interest in ham radio at all!

There were 2 guys in my hs class who were identical twins. One of them took

Mr. Gilmore's typing class the same semester I did. He would switch off classes with his brother, and Mr. Gilmore never knew the difference until late in the semester, when we all finally told him. He chided the brothers sternly, but good-naturedly, and didn't take any action against them. He was a good guy.

73!

Kalman Laudon WD6CZI

From ab4el.com Thu Jun 2 00:34:27 1994

From: "J. D. Delancy" <k1zat@bah.com>

Subject: Re: Spy Boatanchors

Geeeee, I'm so attached to mine, I'm not sure I could cut it loose.

jd

On Wed, 1 Jun 1994, R. D. Keys wrote:

> Speaking of MC88's (that's the all upper case radio typewriter with  
> the slant bar in the 0), mine has gone sour on the rubber platen and  
> rollers. It is essentially hopeless to get repaired anymore.

>

> Does anyone have a spare MC88 or equivalent that they don't need.

>

> My shack would love to become its new home.....!

>

> Maybe one will shake loose from BAland..... (:+{}.....

>

>

> 73 TU SU SK DE NA4G

>

> Bob

>

>

From ab4el.com Thu Jun 2 10:26:58 1994

From: KANAMAA%AMGATE%MATRXA@randb.abbott.com

Subject: Spy stuff/Hammarlund hybrid

>From: Kana, Michael (D9CY)

Date: Thu, Jun 2, 1994 8:56 AM

Subject: Spy stuff/Hammarlund hybrid

To: boatanchors

Howdy All

While going over the threads on spy receivers, I thought about dredging up this old request one more time in case any of the new net surfers might have heard of it....

I have a Hammarlund SP600 like hybrid receiver. The rf front end is firebottle but the backend (from the IF on...) is solid state. There is a large card cage mounted in the set with plug in cards for IF/BFO video, panadapter, etc... The front end uses a nuvistor (?). There is minimum controls on this thing - agc, gain, tuning, etc. There is a phone jack on the front and listening is second fiddle to what this set was used for. Salvage tag was 1991. Fair sold these sets long ago but no manuals. Anybody ever heard of such a beast?

Secondly, I have a military HT that looks like the old BC611. Its late 60's/early 70's vintage. Basic black anodized aluminum with a switch to select air to ground and ground to ground. It uses what appears to be the old style germanium three leg fuses. I was told that it was used as a hamlet radio during the Vietnam war. Some folks told me they have seen radios similar to this one but were brown in color and had Vietnamese markings on them. No data on this one....

Any thoughts?????

Mike AA9IL

P.S. I just got my first (well actually second - but thats a long story about the one that got away) WJ converter. The collection has begun!

From ab4el.com Wed Jun 1 20:34:32 1994

From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)

Subject: Swans, Drakes, Ducks, Geese

ul> From: ulowell!bangate.pge.com!DCPP!IC!HAK1

ul> As a side note, I consider the GT-550 a better radio than the Swan  
ul> series but people shy away from the Galaxy's.

The ham club in my place of work died from apathy before I ever got to join....they gave me the "station" -- a Hammarlund HQ-129X in pretty good shape physically (usual wear around knobs), and a Swan 260 Cygnet SSB rig.

That Swan has to be one of the most asymmetrical commercial rigs I've ever seen! Tried it out on rx -- hissy audio. Haven't tried tx or tested the tubes, but I have the manual if it needs an overhaul. Nice

size for a rig; all-in-one with built in AC p/s is a plus. Light, too. I might set up as a bedroom station on 15 or ten eventually.

Too many other restoration projects higher on the list, though:

Heath HD-11 Q-mult (sold it to a friend, he says it's dead...hmmm. I didn't have a rx with a Q-mult input at the time. If I can't fix something with ONE TUBE..... <grin>

Westinghouse 1922 DA amplifier unit; my best friend's great-grandfather's. Both audio xfms open; got replacement coils from AES

Johnson Invader 200 (got the pwr connectors from chassis-to-chassis, but what GAUGE wire should I use between the connectors????)

Drake R-4A (crapped out after working beautifully)  
Hammarlund HQ-170 (sizzled bypass cap or resistor, haven't looked yet)  
Johnson Challengers (bzzzzzzzzzzzzt! filter cap time)  
Drake AC-4 (so I can get the Drake tx online)

As always (see tagline)

--Andy

... Too many radios? Too little room. Too many radios? Too little room.

From ab4el.com Tue May 31 11:30:05 1994  
From: don merz <71333.144@CompuServe.COM>  
Subject: Thanks...

Geez...you guys OD'ed Compuserve...mailbox full...20 messages undelivered...

I appreciate all the nice comments on my postings. I'm sorry that Matt has a problem with them. The list is an honor and a privilege for me... and the highlight of each workday. It's nice to know that some folks have found the posts useful.

I am not a business...just an ADDICT getting a fix...I don't keep a large collection because I can't afford to. I just re-use the same money over and over. I try to add some value by getting manuals where needed, replacing caps, cables and accessories. But sometimes I'm just a user. I often buy larhe lots of stuff just to get one or two items which is why it sems like there's always a lot of stuff here.

I don't take this stuff too seriously. I try to make sure everyone gets what they pay for and is happy with their purchase. It doesn't ALWAYS work out and I give no-questions-asked refunds when someone is dis-satisfied. This

has only happened three times in 2 years.

A note on prices: Please feel free to contact me if you need a price, either for buying or selling. I'll tell you exactly what I've seen. Most of my own pricing is just a guess based on past experience. And as, some people noticed, I lower the prices when things don't sell, unless I feel strongly about holding the line.

Thanks for your support. I hope you all are enjoying this list as much as I am.

From ab4el.com Tue May 31 13:16:41 1994  
From: "Rhett T. George" <rtg@ee.duke.edu>  
Subject: Re: Thanks...

And, THANK YOU, Don, for your patient entry of your list which is an education for many of us.

Rhett George

From ab4el.com Thu Jun 2 15:09:58 1994  
From: tech@cs.athabascau.ca (Richard Loken)  
Subject: re: the high price of entry level rigs

See the June QST page 117 Novice Roundup results with a picture of KB0LFV and his DX60/HG10 and Drake twins. Now there is a man who knows good gear when he sees it. There is also what looks like a HW9 next on top of the DX60.

The next two pictures are young kids running the old man's ricebox. I have to work on my quartet and get them pictured all smiles running the J-37 and the DX100.

That will be great...

Richard Loken VE6BSV, Systems Programmer - VMS : "...underneath those  
Athabasca University : tuques we wear, our heads  
Athabasca, Alberta Canada : are naked!"  
\*\* tech@cs.athabascau.ca \*\* : - Aurthor Black

From ab4el.com Tue May 31 12:22:49 1994  
From: HAK1%IC%DCPP@bangate.pge.com  
Subject: True BA radio obtained.....

Well folks, I finally got a REAL BA receiver this weekend. It's an ITT Makay 3010C Marine Receiver in pretty good shape. It's size is a little bit bigger than a 75A4 and covers continuously from 70kc to 30mc. It may be the last all tube receiver Makay made. This unit was made in late 1967. The neat slide rule type dial is calibrated in 2kc increments and it has a product detector

with an USB/LSB/VAR BFO switch and knob. It uses a 6.0khz crystal filter in the first IF and Collins mechanical filters in the second IF. I even got the original manual and schematic with it ! I have always wanted a receiver like this ever since I saw a review of the 3010B in the April 1967 QST. The front panel of this receiver looks a little different (and more modern) than the one in QST.

Have any of the marine ops on this net ever had any experience with these receivers ?

Howard AD6Y  
hak1@pge.com

From ab4el.com Wed Jun 1 14:31:14 1994  
From: HAK1%IC%D CPP@bangate.pge.com  
Subject: Tube cross reference

I need an approximate cross reference for the following two pentode tubes:

6688 and 7788

They aren't in any of my manuals although I know the pin configurations.

Howard AD6Y  
hak1@pge.com

From ab4el.com Wed Jun 1 23:20:35 1994  
From: Fire Bottle archive handler <firebot1@jackatak.raider.net>  
Subject: Tube cross reference

> I need an approximate cross reference for the following two pentode tubes:  
> 6688 and 7788  
    ^^^^

Sharp cut-off pentode (small button, miniature 9-pin, 1 3/4" total height, 1 1/2" envelope height) terminal diagram 9EQ (even though you said you knew it already ;) 6.3v@300mA heaters. Typical use: Class A amplifier. 190V plates, 630 ohm cathode resistor, 160v screen grid, 3.3mA screen grid current, 13mA plate current, 90Kohms AC plate resistance, 16,500micromhos transconductance...

The above from RCA Receiving Tube Manual (c) 1973... no real stuff,  
just a line in the back.

Nothing for the 7788... probably an old inefficient precursor to the  
popular Eimac bottle of similar numbers: the not so rare as to justify  
the price 8877!!!! ;^) ;^)

73,

Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

Fire Bottle Server (Boat Anchors Get Out and Keep You Warm!)

firebotl@jackatak.raider.net

Where Old Radios and Fun ... GO TOGETHER!

+-----human interface: root@jackatak.raider.net -----+

From ab4el.com Thu Jun 2 02:25:17 1994

From: Fire Bottle archive handler <firebotl@jackatak.raider.net>

Subject: Tube cross reference

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> 6688 and 7788

^^^^

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Where Old Radios and Fun ... GO TOGETHER!

+-----human interface: root@jackatak.raider.net -----+

From ab4el.com Thu Jun 2 08:41:45 1994

From: JosephWP@aol.com

Subject: Re: Tube cross reference

The 7788:

Frame grid pentode  
Fil: 6.3 V 0.34 A  
Max Plate Watts: 5  
Max Plate Volt 250  
Class A Amp, 135 plate V, 165 screen V, Rk=360 ohms  
Gm 50,000

Joseph +

From ab4el.com Thu Jun 2 11:42:59 1994  
From: JosephWP@aol.com  
Subject: Re: Tube cross reference

>>>>  
>The 7788:  
>  
>Frame grid pentode  
>Fil: 6.3 V 0.34 A  
>Max Plate Watts: 5  
>Max Plate Volt 250  
>Class A Amp, 135 plate V, 165 screen V, Rk=360 ohms  
>Gm 50,000  
>  
>Joseph +

The plate has a LOWER voltage than the screen? Error or not-seen-before.  
>>>>>

I got the stats directly out of a GE Tube manual.

Checked them again, and that's what is there. Could be a misprint, I suppose, as it seems funny to me too. Perhaps the plate V is suppose to be 235.

Will try to find another ref on this one.

Joseph +

Joseph +

From ab4el.com Wed Jun 1 20:33:03 1994  
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)



Subject: Tube sainthood?

RDK> From: ulowell!csemail.cropsci.ncsu.edu!rdkeys (R. D. Keys)

RDK> What good is ``progress'' if the old gear still functions as good or  
RDK> better than the newer overly fancy stuff.

That's the whole point, or it should be. We love and use the old gear, with tubes, not just because it is AMERICAN and not JAPANESE, but because it will still squirt a signal from here to there. That's most of the fun! I feel sorry for anyone who wants to get into ham radio right now -- a sagging economy and a ham rig of \$900 or better for something reasonable? Sorry. \$900 buys a heck of a lot of replacement bypass caps! <grin>

--Andy

... AM Swap Net, Thursdays, 7:30 Eastern, on or about 3885 AM

From ab4el.com Tue May 31 16:59:42 1994

From: larry wise <lewise@bga.com>

Subject: VSS

Gary:

You mentioned the VSS net. Can you give the info to join/subscribe?

Thanks,

KA5T

--

Larry E. Wise                   lewise@bga.com

Georgetown, Tx

512-863-5870

From ab4el.com Mon May 30 23:10:26 1994

From: censun1!gc@uunet.UU.NET (Gary Chatters)

Subject: Re: What is a boatanchor

Mitch asks:

>

> \*so\*... for the purposes of this list, just what is a "boat  
> anchor"???? i certainly don't want to taint the list...

>

> mitch,  
> wa4osr

>

A reasonable question; one that I had when I first joined the list.

I am not sure there is a precise definition, but for the purpose of this list think of "vacuum-tube era" radio communications.

This would mean most of the discussion is related to vacuum-tube based radios (e.g., Hallicrafters, Hammarlund, Collins, and old military radios). Test equipment or anything else of use in amateur radio (or even commercial radio) can also be discussed.

The discussion has not been limited to radios. Other discussions have covered:

- Telegraph keys (manufacturers, types,...)
- Spark gap transmitters
- Marine radio operations on 500kc.
- The rain in Dayton.

I haven't heard of any objection to these discussions.

Several participants in this list are also interested in the solid-state equipment. The vintage solid-state (VSS) maillist was started as a similar list to discuss such things as older HP and Tek test equipment and early solid-state radios. Its traffic level is much less than boatanchors due to the narrower topic and also due to some trouble with the list processor provider. But there have been some interesting discussions of HF general coverage receivers for example.

Note: This is not an official definition, just someone trying to help someone else who is in the same position I was in once.

Gary

From ab4el.com Tue May 31 11:01:19 1994  
From: "Roy Morgan" <morgan@speckle.ncsl.nist.gov>  
Subject: Re: What is a boatanchor

>Mitch asks:

>

>>

>> \*so\*... for the purposes of this list, just what is a "boat  
>> anchor"???? i certainly don't want to taint the list...

If it GLOWS, I like it.

---

Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899  
301-975-3254 Fax: 301-948-6213 Internet: morgan@speckle.ncsl.nist.gov

---

From ab4el.com Tue May 31 20:52:29 1994  
From: Andy.Wallace@f278.n324.z1.fidonet.org (Andy Wallace)  
Subject: WWIVnet tube net

ul> From: ulowell!rtfm.mlb.fl.us!rsummerl (Ray Summerl)

ul> Andy,

ul> I'd like to join your group. What do I need to do?

Okay. First you need to find a BBS that is running "WWIV" software. If you give me your Area Code I can look up those in your area for you. There are a lot of 'em so it might not be tough to find one on your own. Anyway, "WWIV" is the software, by Wayne Bell.

TUBE TYPE HAM AND OLD RADIO CHAT is "Subtype 45806" and the host is board number 5806, my brother's board, Reality BBS, Chelmsford, Massachusetts. If you want to call long distance, it's (508) 251-8827. (If you call, you might mention your interests and that you heard about the sub direct from me!)

Tube Chat is a message conference (nationwide) on the board, it's not like an Internet newsgroup. You can read and reply manually or you can use an offline (QWK) reader if the BBS supports it. Reality does. Anyway, once you find (and get in cahoots with) a WWIV sysop, ask him to "Subscribe" to the sub, 45806 at 5806. It's 'auto-requestable' so if he/she knows how to do that, it'll be automatic.

I'd like to see a lot of you folks on there -- mostly it's just been ME talking.....

Please let me know if you do join!

--Andy

... Tube radios SMELL NICE.

From ab4el.com Wed Jun 1 15:45:59 1994  
From: Anderson\_Neal@lanmail.ncsc.navy.mil  
Subject: WWIVnet tube net

Wow did this strike a nerve! Tube radios DO smell nice! When I read your tag line, I suddenly remembered the wonderful aroma of old Drakes

warming up! I hadn't realized that this must be one of the reasons I like old tube gear.

Neal N4UYR

----- Replied Message Body -----

Date: 5-31-94 7:30pm

>From: {Andy.Wallace@f278.n324.z1.fidonet.org}:ddn:navy

-----  
\* deleted\*

--Andy

.... Tube radios SMELL NICE.

From ab4el.com Thu Jun 2 01:56:57 1994

From: "James H. Haynes" <haynes@cats.ucsc.edu>

Subject: Re: WWIVnet tube net

I was in a store today and noticed there were selling "tube socks."  
Should I get a supply of these for my tube equipment?